Annex D Town of Loomis

D.1 Introduction

This Annex details the hazard mitigation planning elements specific to the Town of Loomis, a previously participating jurisdiction to the 2016 Placer County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document, but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the Town. This Annex provides additional information specific to Loomis, with a focus on providing additional details on the risk assessment and mitigation strategy for this community.

D.2 Planning Process

As described above, Loomis followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Placer County Hazard Mitigation Planning Committee (HMPC), the Town formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table D-1. Additional details on Plan participation and Town representatives are included in Appendix A.

Table D-1 Town of Loomis – Planning Team

Name	Position/Title	How Participated
Mary Beth Van Voorhis	Planning Director	Reviewed LHMP planning process and contributed to updated details
David Strock	Director of Public Works	Reviewed LHMP planning process and contributed to updated details
Carol Parker	Administrative Analyst	Reviewed LHMP planning process and contributed to updated details
Sean Burke	Building Official	Reviewed LHMP planning process and contributed to updated details
Merrill Buck	Town Engineer-Consultant	Reviewed LHMP planning process and contributed to updated details
Sean Rabé	Town Manager	Reviewed LHMP planning process and contributed to updated details
Brad Donohue	Special Project Coordinator-Consultant	Reviewed LHMP planning process and contributed to updated details

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the Town integrated the previously approved 2016 Plan into existing planning mechanisms and programs. Specifically, the Town incorporated into or implemented the 2016 LHMP through other plans and programs shown in Table D-2.

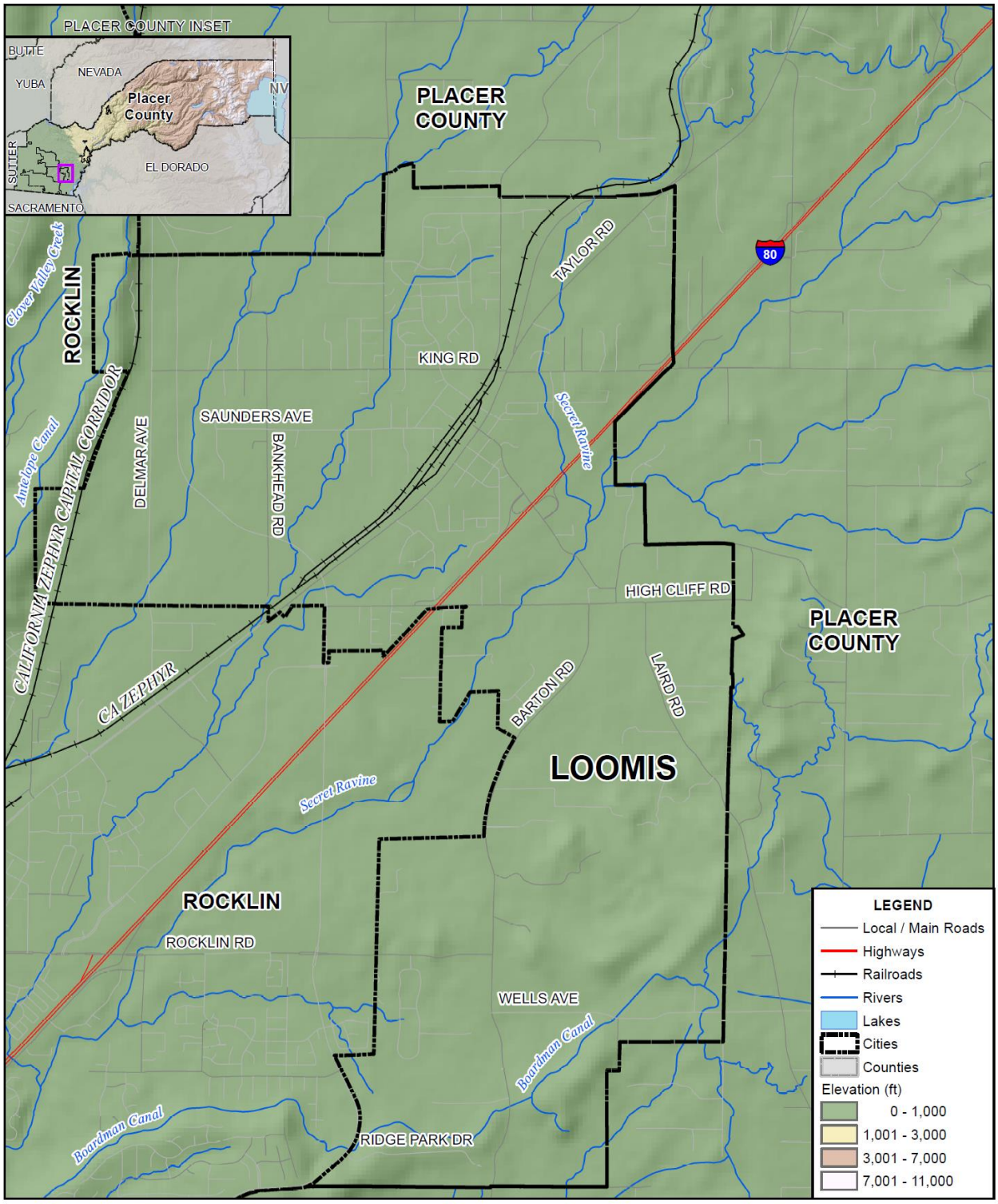
Table D-2 2016 LHMP Incorporation

Planning Mechanism 2016 LHMP Was Incorporated/Implemented In.	Details: How was it incorporated?
N/A	The City had no related planning mechanisms since 2016.

D.3 Community Profile

The community profile for the Town of Loomis is detailed in the following sections. Figure D-1 displays a Town map and the location of Loomis within Placer County.

Figure D-1 Town of Loomis



Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

D.3.1. Geography and Climate

Loomis is a small, semi-rural community located in rapidly urbanizing western Placer County in California's Central Valley. The Town is located approximately 25 miles northeast of the City of Sacramento, along Interstate 80. Loomis is in the western portion of the Loomis Basin, an 80-square mile area of the Placer County foothills. The town ranges in elevation from approximately 399 to 625 feet above msl and covers an area of about 7.3 square miles. Stream drainages in the area include Antelope Creek and Secret Ravine.

Interstate 80, traversing northeast through the center of Town, divides Loomis into two distinct areas. The area north of I-80 contains all the community's existing retail, office and industrial development, as well as higher density residential development, bounded by larger semi-rural residential lots. The area south of I-80 is almost exclusively rural and residential in character.

Loomis' average temperatures range from the mid 80°F to mid 90°F during the summer to the mid 30°F to high 40°F during the winter. Loomis receives an average of 36.51 inches of rain annually and only an occasional dusting of snow in the winter.

D.3.2. History

As early as 1825, trappers and hunters following the American River came into the Loomis basin. Like the beginnings of many cities in Placer County, Loomis began as a mining town, but soon became a booming center of the fruit-growing industry, supporting many packinghouses. During the 1850s miners worked along Secret Ravine and farmers and ranchers began to move into the Loomis area. The Town was established in 1850, but not incorporated until 1984. The Central Pacific Railroad was constructed through Loomis in 1864. By 1872 the transcontinental link was completed and helped to expand the market for fruits, which were being produced on a commercial scale. For several years, fruit from the Loomis area was world renowned for its quality. Eventually disease destroyed many orchards established in the late 1800s and fruit production declined significantly. Today it is a very small part of the town's economy.

D.3.3. Economy

US Census estimates show economic characteristics for the Town of Loomis. These are shown in Table D-3 and Table D-4. Mean household income in the Town was $121,508. Median household income in the Town was $83,162.

Table D-3 Town of Loomis – Civilian Employed Population 16 years and Over

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	0	0.0%
Construction	392	12.8%
Manufacturing	235	7.7%
Wholesale trade	41	1.3%
Retail trade	502	16.4%

Industry	Estimated Employment	Percent
Transportation and warehousing, and utilities	165	5.4%
Information	20	0.7%
Finance and insurance, and real estate and rental and leasing	117	3.8%
Professional, scientific, and management, and administrative and waste management services	309	10.1%
Educational services, and health care and social assistance	855	27.9%
Arts, entertainment, and recreation, and accommodation and food services	78	2.5%
Other services, except public administration	173	5.7%
Public administration	174	5.7%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

Table D-4 Town of Loomis – Income and Benefits

Income Bracket	Percent
<$10,000	6.3%
$10,000 – $14,999	0.6%
$15,000 - $24,9999	5.5%
$25,000 – $34,999	5.8%
$35,000 – $49,999	5.6%
$50,000 – $74,999	25.4%
$75,000 – $99,999	7.6%
$100,000 – $149,999	23.3%
$150,000 – $199,999	7.5%
$200,000 or more	12.3%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

D.3.4. Population

The California Department of Finance estimated the January 1, 2020 total population for the Town of Loomis was 6,888.

D.4 Hazard Identification

Loomis's identified the hazards that affect the Town and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to Loomis (see Table D-5).

Table D-5 Town of Loomis—Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/ Severity	Significance	Climate Change Influence
Agricultural Hazards	Limited	Unlikely	Negligible	Low	Medium
Avalanche	Limited	Unlikely	Negligible	Low	Medium
Climate Change	Extensive	Likely	Limited	Medium	–
Dam Failure	Limited	Unlikely	Negligible	Low	Medium
Drought & Water Shortage	Extensive	Occasionally	Negligible	Medium	High
Earthquake	Significant	Occasional	Limited	High	Low
Floods: 1%/0.2% annual chance	Significant	Occasional	Limited	Medium	Medium
Floods: Localized Stormwater	Limited	Likely	Limited	Medium	Medium
Landslides, Mudslides, and Debris Flows	Limited	Unlikely	Negligible	Low	Medium
Levee Failure	Limited	Unlikely	Negligible	Low	Medium
Pandemic	Extensive	Likely	Critical	Medium	Medium
Seiche	Limited	Unlikely	Negligible	Low	Medium
Severe Weather: Extreme Heat	Extensive	Likely	Negligible	Low	High
Severe Weather: Freeze and Snow	Limited	Occasional	Negligible	Low	Medium
Severe Weather: Heavy Rains and Storms	Limited	Unlikely	Negligible	Low	Medium
Severe Weather: High Winds and Tornadoes	Significant	Likely	Limited	Medium	Low
Tree Mortality	Significant	Likely	Limited	Low	High
Wildfire	Significant	Likely	Limited	Medium	High

Geographic Extent
Limited: Less than 10% of planning area
Significant: 10-50% of planning area
Extensive: 50-100% of planning area

Likelihood of Future Occurrences
Highly Likely: Near 100% chance of occurrence in next year, or happens every year.
Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less.
Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years.
Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years.

Magnitude/Severity
Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths.
Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability.
Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability.
Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid.

Significance
Low: minimal potential impact
Medium: moderate potential impact
High: widespread potential impact

Climate Change Influence
Low: minimal potential impact
Medium: moderate potential impact
High: widespread potential impact

D.5 Hazard Profile and Vulnerability Assessment

The intent of this section is to profile Loomis's hazards and assess the Town's vulnerability separate from that of the Placer County Planning Area as a whole, which has already been assessed in Section 4.3 Hazard Profiles and Vulnerability Assessment in the Base Plan. The hazard profiles in the Base Plan discuss overall impacts to the Placer County Planning Area and describes the hazard problem description, hazard location and extent, magnitude/severity, previous occurrences of hazard events and the likelihood of future occurrences. Hazard profile information specific to the Town is included in this Annex. This vulnerability assessment analyzes the property, population, critical facilities, and other assets at risk to hazards ranked of medium or high significance specific to the Town (as identified in the Significance column of Table D-5) and also includes a vulnerability assessment to the three primary hazards to the State of California: earthquake, flood, and wildfire. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the Base Plan.

D.5.1. Hazard Profiles

Each hazard vulnerability assessment in Section D.5.3, includes a hazard profile/problem description as to how each medium or high significant hazard affects the Town and includes information on past hazard occurrences and the likelihood of future hazard occurrence. The intent of this section is to provide jurisdictional specific information on hazards and further describes how the hazards and risks differ across the Placer County Planning Area.

D.5.2. Vulnerability Assessment and Assets at Risk

This section identifies Loomis's total assets at risk, including values at risk, populations at risk, critical facilities and infrastructure, natural resources, and historic and cultural resources. Growth and development trends are also presented for the community. This data is not hazard specific, but is representative of total assets at risk within the community.

Values at Risk

The following data from the Placer County Assessor's Office is based on the 2020 Assessor's data. The methodology used to derive property values is the same as in Section 4.3.1 of the Base Plan. This data should only be used as a guideline to overall values in the County, as the information has some limitations. The most significant limitations are created by Proposition 13 and the Williamson Act as detailed in the Base Plan. With respect to Proposition 13, instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the County. It is also important to note, in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table D-6 shows the 2020 Assessor's values and content replacement values (e.g., the values at risk) broken down by property type for the Town.

Table D-6 Town of Loomis – Total Values at Risk by Property Use

Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Agricultural	1	1	$13,875	$109,235	$109,235	$232,345
Commercial	132	86	$42,718,862	$51,275,670	$51,275,670	$145,270,202
Industrial	132	114	$19,276,129	$54,492,331	$81,738,498	$155,506,958
Institutional	30	16	$2,596,293	$15,229,453	$15,229,453	$33,055,199
Miscellaneous	284	10	$28,153,573	$7,523,815	$7,523,815	$43,201,203
Natural / Open Space	26	4	$1,681,942	$2,385,381	$2,385,381	$6,452,704
Residential	2,390	2,321	$315,108,683	$687,552,151	$343,776,063	$1,346,436,897
Loomis Total	**2,995**	**2,552**	**$409,549,357**	**$818,568,036**	**$502,038,115**	**$1,730,155,508**

Source: Placer County 2020 Parcel/Assessor's Data

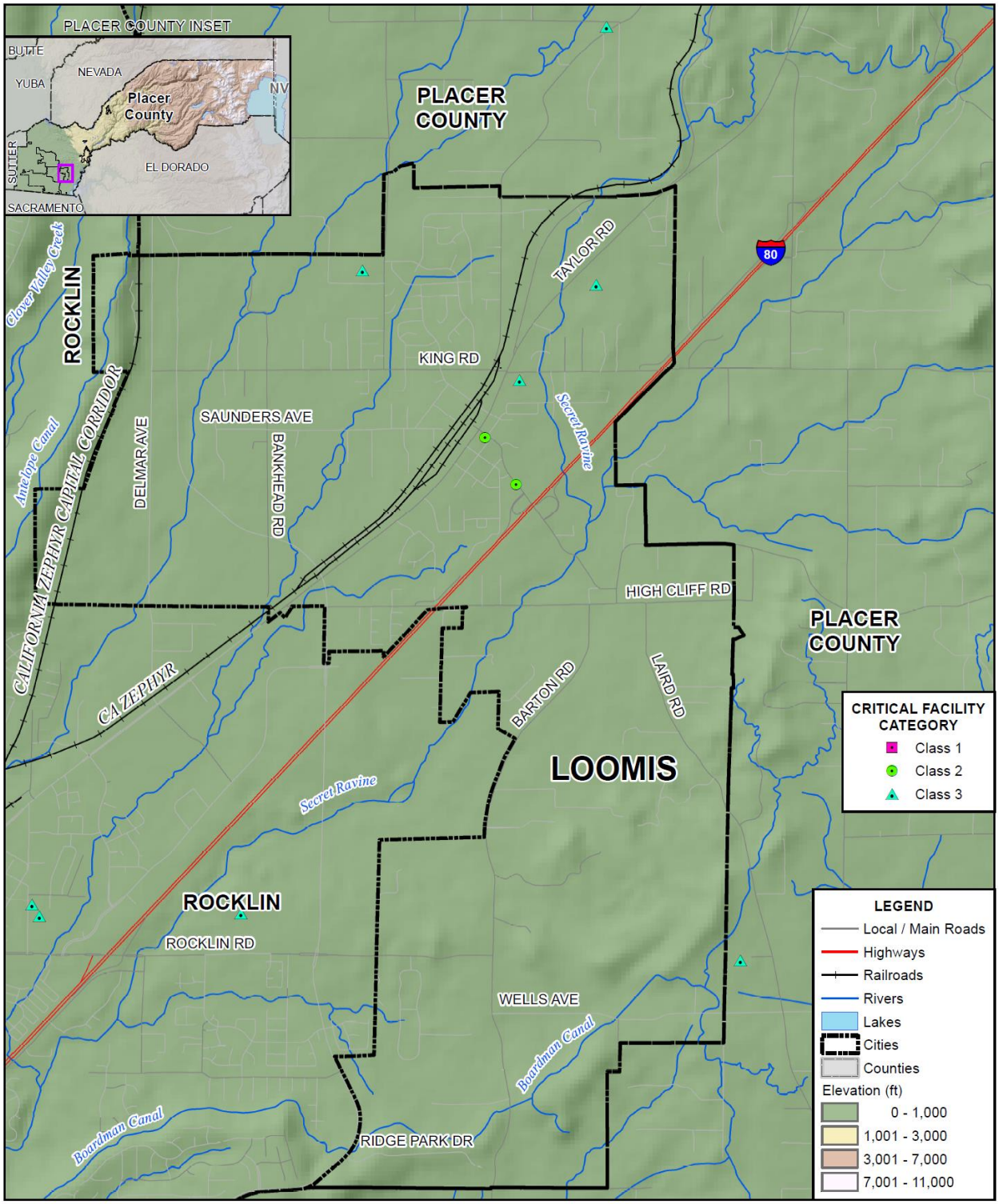
Critical Facilities and Infrastructure

Critical facilities and infrastructure are those buildings and infrastructure that are crucial to a community. Should these be damaged, it makes it more difficult for the community to respond to and recover from a disaster. For purposes of this plan, a critical facility is defined as:

> *Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.*

This definition was refined by separating out three classes of critical facilities as further described in Section 4.3.1 of the base plan. An inventory of critical facilities in the Town of Loomis from Placer County GIS is shown on Figure D-2 and detailed in Table D-7. Details of critical facility definition, type, name, address, and jurisdiction by hazard zone are listed in Appendix F.

Figure D-2 Town of Loomis – Critical Facilities



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Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-7 Town of Loomis – Critical Facilities

Critical Facility Class	Critical Facility Type	Facility Count
Class 2	Fire Station	1
	Police Station	1
Class 3	School	3
Loomis Total		**5**

Source: Placer County GIS

Natural Resources

Natural resources are unique to each area and are difficult to replace. Should a natural disaster occur, these species and locations are at risk. The Town of Loomis has a variety of natural resources of value to the community:

- Three sensitive plant communities: Oak Woodland and Savannah, Riparian and Stream habitat, and Wetlands.
- No vernal pools within the Town limits, but several just outside.
- One special status animal species known to occur: the Valley Elderberry longhorn Beetle.
- One special status animal species with the potential to occur based on habitat and behavioral patterns: Cooper's Hawk, Black-Shouldered Kite, and Western Pond Turtle.

Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk.

Historic and Cultural Resources

The Town of Loomis does not have any registered federal historic sites.

Although Loomis does not have any sites on the National Register, there are several assets within Loomis that define the community and represent the Town's history. Some of the historical sites of importance to Loomis are listed below.

- Blue Goose (American Fruit Co.) - 3550 Taylor Road
- High Hand- Loomis Fruit Growers Assoc – 3750 Taylor Road
- New Town Hall of Loomis- was Bank of Loomis -3665 Horseshoe Bar Road
- Bradley House- on Barton Road
- Barton Rd. below Wells- Wells Fargo Stage stop- partial cobblestone wall
- Main Drug- built 1912 – 3685 Taylor Road
- Nelthorpes – 3650 Taylor Road
- Loomis ACE Hardware in the Christiansen's Building which was Law Brothers – Taylor Road
- Red's Bistro was the Horseshoe Bar Grill which was many different stores- 3645 Taylor Road
- Congregational Church/Koininia on Magnolia Street
- Loomis Mutual Supply Company at 5827 Horseshoe Bar- Flooring USA and Creative Nails building.

- Most structures on Taylor Road between Walnut St. and Horseshoe Bar- all rebuilt shortly after 1915 fire.
- Nute/Barton Road house was built in 1891.
- Crossley/Turner cabin/barn- still upright

Growth and Development Trends

As part of the planning process, the HMPC looked at changes in growth and development, both past and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time. Information from the Town of Loomis General Plan 2013-2021 Housing Element, the California Department of Finance, the US Census Bureau form the basis of this discussion.

Historic Population Trends and Current Population

Population growth can increase the number of people living in hazard prone areas. Loomis has generally seen slow and steady growth, with the exception of the 1980s which saw large growth. Loomis has seen growth rates as shown in Table D-8.

Table D-8 Town of Loomis – Population Changes Since 1970

Year	Population	Change	% Change
1970	1,108	–	–
1980	1,284	176	15.9%
1990	5,705	4,421	344.3%
2000	6,260	555	9.7%
2010[1]	6,430	170	2.7%
2020[2]	6,888	458	7.1%

Source: [1]US Census Bureau, [2]California Department of Finance

Special Populations and Disadvantaged Communities

The 2021-2029 Town of Loomis Housing Element noted that according to the 2014–2018 ACS, approximately 16.3 percent of the population (1,103 persons) are senior residents (65 years or older). Additionally, in 2018, there were 715 senior-headed households in Loomis, as shown in Table 14. This accounts for approximately 27.4 percent of the total households in Loomis, a 29.3 percent increase from 2010 (553 households, 23.4 percent). Loomis has a slightly smaller proportion of senior households compared to that of Placer County (32.4 percent). Senior households on a fixed or limited income might need more affordable housing options. In Loomis, 11.8 percent of seniors are living below the poverty level.

In 2018, 637 persons (9.5 percent of the total population) in Loomis had a disability. Of these residents, 22.6 percent (144 persons) had hearing difficulty, 9.4 percent (60 persons) had vision difficulty, 29.2 percent (186 persons) had cognitive difficulty, 58.1 percent (370 persons) had ambulatory difficulty, 34.1 percent (217 persons) had difficulty with self-care, and 55.9 percent (356 persons) had difficulty living independently. A single person may have more than one difficulty.

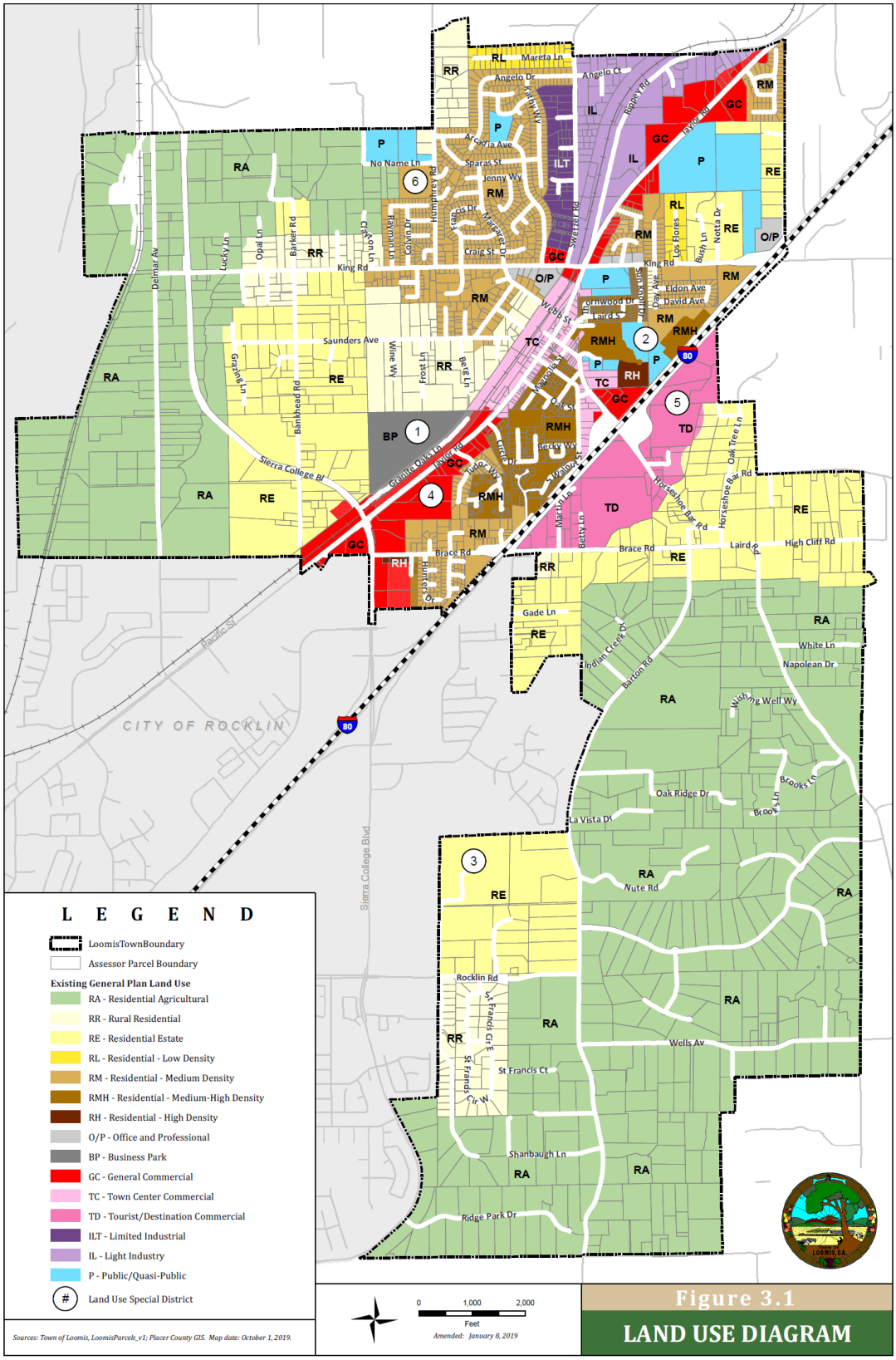
It is estimated that there is only one homeless individual on any given day in Looms. The single homeless individual counted in the Town of Loomis identified as male and reported having been in Loomis for five years or more.

Land Use

State planning law requires that the land use element of a general plan include a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The Town's land use designations are generally described below and mapped on the Land Use Diagram (Figure D-3). The Loomis Municipal Code provides detailed land use and development standards for development.

With this General Plan, a variety of new land use designations have been established to reflect the more mixed and, in some cases, more intense land uses envisioned for Loomis. New mixed-use designations provide the opportunity for a combination of residential, commercial, and office uses on a single site, depending on the designation. Future land use for the Town of Loomis from the Town of Loomis General Plan Land Use Element is shown on Figure D-3.

Figure D-3 Town of Loomis – Land Use Diagram



Source: Town of Loomis Planning Department – retrieved on 5/6/2021

Development since 2016 Plan

As discussed in Section 4.3.1 of the Base Plan, future development has occurred in the Town since the last plan. Some of this has occurred in hazard prone areas. The Town Building Department tracked total building permits issued since 2016 for the Town. These are tracked by total development, property use type, and hazard risk area. These are shown in Table D-9 and Table D-10.

Table D-9 Town of Loomis – Total Development Since 2016

Property Use	2016	2017	2018	2019	2020
Agricultural	4	3	2	3	3
Commercial	1	1	0	1	0
Industrial	0	1	0	0	0
Residential	21	14	10	5	6
Unknown	0	0	0	0	0
Total	**26**	**19**	**12**	**9**	**9**

Source: Town of Loomis Building Department

Table D-10 Town of Loomis – Development in Hazard Areas since 2016

Property Use	1% Annual Chance Flood	Levee Protected Area	Wildfire Risk Area[1]	Other
Agricultural	0	0	12	0
Commercial	0	0	0	0
Industrial	0	0	0	0
Residential	0	0	51	0
Unknown	0	0	0	0
Total	**0**	**0**	**63**	**0**

Source: Town of Loomis Building Department

[1]Moderate or higher wildfire risk area

Future Development

The Sacramento Council on Governments (SACOG) modeled population projections for the Town of Loomis and other areas of the region in 2012 for a Metropolitan Transportation Plan/Sustainable Communities Strategy report. This forecast uses a 2008 base year estimate with projections to 2020 and 2035 for population, housing units, households and employment. SACOG estimated the Town population in 2020 and 2035 to be 6,443 and 8,463 respectively. Future housing units in the City are shown in Figure D-4.

Figure D-4 Future Populations in the Town of Loomis

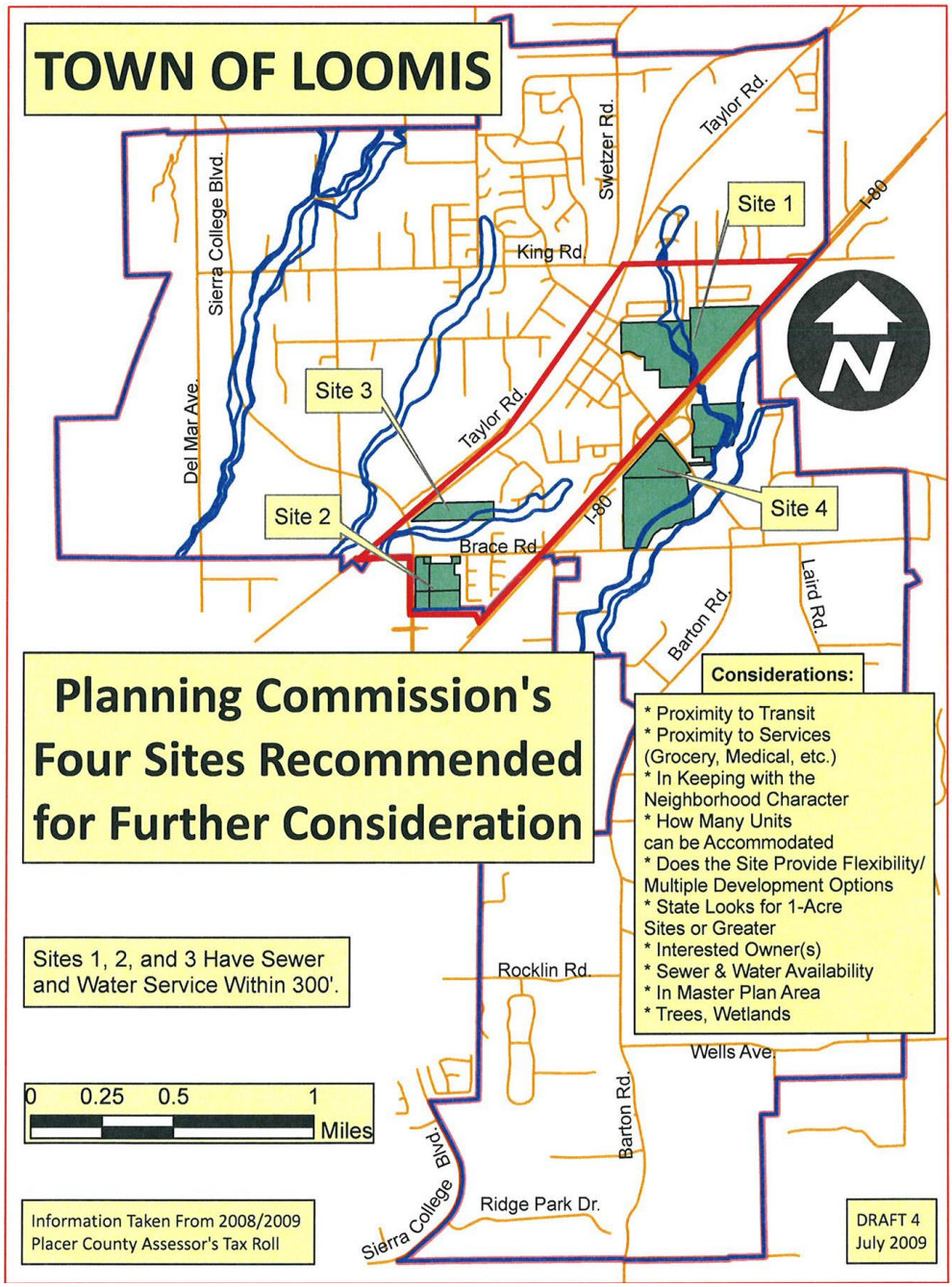
Draft as of June 2019

2020 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing Conditions		2020 MTP/SCS Preferred Scenario TOTAL		2020 MTP/SCS Preferred Scenario TOTAL		Build Out Estimate		2020 MTP/SCS Preferred Scenario GROWTH		2020 MTP/SCS Preferred Scenario GROWTH	
Review of 2035 and 2040 Draft Preferred Scenario	Total in Year 2016		Total in Year 2035		Total in Year 2040		*Total at Build Out*		Growth from 2016 to 2035		Growth from 2016 to 2040	
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Loomis												
Center and Corridor Communities (Town Center area)	470	150	730	550	790	550	1,290	700	250	400	320	400
Established Communities	2,730	1,470	3,130	1,520	3,230	1,540	4,040	1,950	400	50	500	70
Rural Residential Communities	410	850	490	910	510	940	780	1,320	80	60	100	90
Jurisdiction Total	**3,610**	**2,470**	**4,350**	**2,980**	**4,530**	**3,030**	**6,110**	**3,970**	**730**	**510**	**920**	**560**

Source: Sacramento Area Council of Governments - Draft as of June 2019. 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy Update - Review of 2035 and 2040 Draft Preferred Scenario.

The Town of Loomis has identified sites in the Town that may be considered for future development. These areas are shown on Figure D-5.

Figure D-5 Town of Loomis Future Development Areas



Source: Loomis Planning Commission

More general information on growth and development in Placer County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Placer County Vulnerability and Assets at Risk of the Base Plan.

In the immediate future, the Town has three areas that are planned:

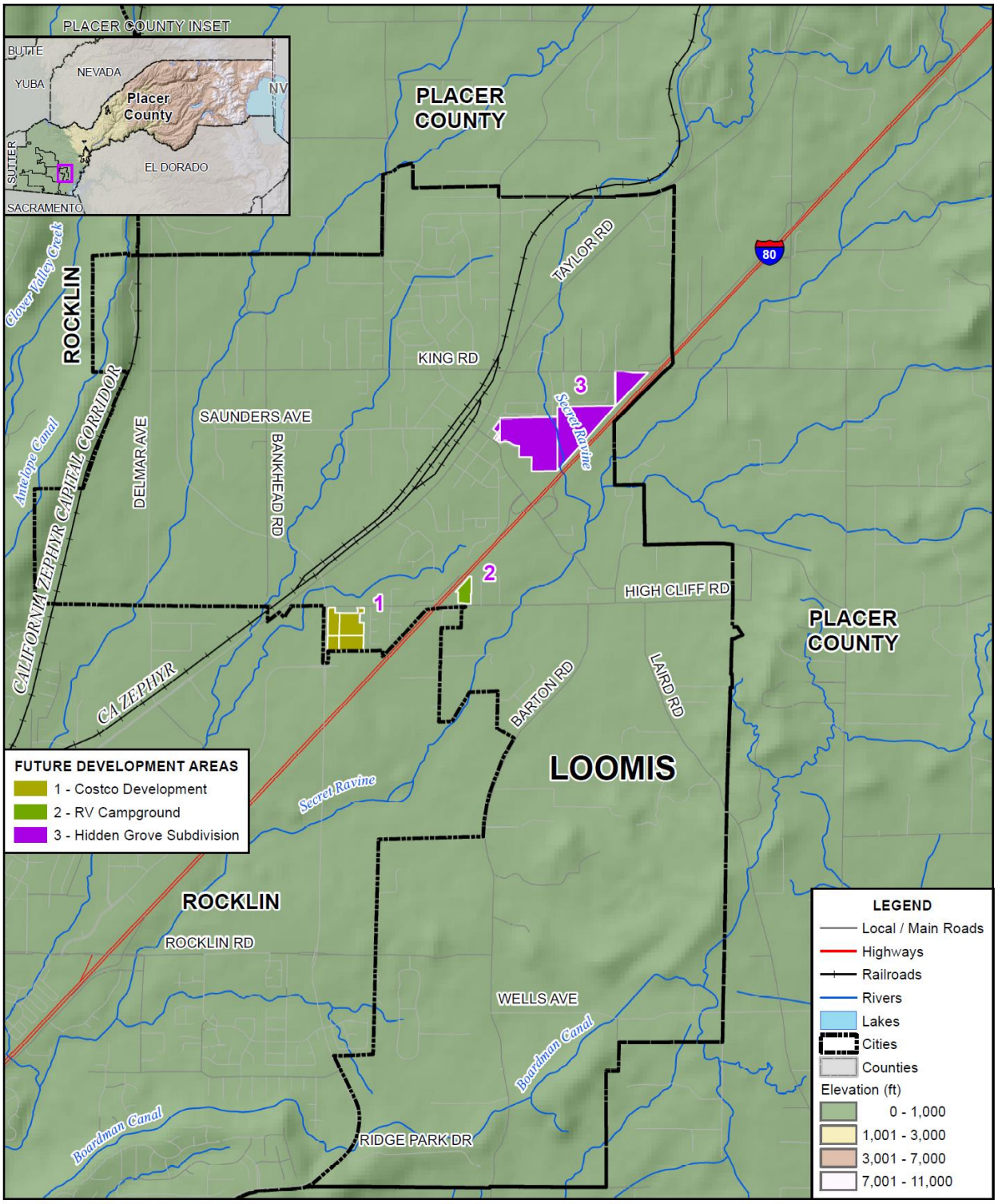
- Costco Development

- RV Campground (37 campsites on a minimum of 1,800 sq.ft. each for weekend, full time, and part-time RV travelers)
- Hidden Grove Subdivision

GIS Analysis

Using GIS, the following methodology was used in determining parcel counts and acreages with future development projects in the Town of Loomis. Future development areas in the Town were provided in mapped format by the Town. 3 areas were provided. Using the GIS parcel spatial file for each of these areas, the 3 areas and 14 parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-6 shows the locations of future development areas the Town is planning to develop. Table D-11 shows the parcels and acreages of each future development area in the Town.

Figure D-6 Town of Loomis – Future Development Areas



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Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-11 Town of Loomis – Future Development Area Parcel and Acre Counts

Future Development / Map Number / Description / APN	Total Parcel Count	Improved Parcel Count	Total Acres
Costco Development	4	0	16.5
RV Campground	1	1	3.4
Hidden Grove Subdivision	9	4	58.2
Grand Total	**14**	**5**	**78.2**

Source: Town of Loomis GIS

D.5.3. Vulnerability to Specific Hazards

This section provides the vulnerability assessment, including any quantifiable loss estimates, for those hazards identified above in Table D-5 as high or medium significance hazards. Impacts of past events and vulnerability of the Town to specific hazards are further discussed below (see Section 4.1 Hazard Identification in the Base Plan for more detailed information about these hazards and their impacts on the Placer County Planning Area). Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.3 of the Base Plan.

An estimate of the vulnerability of the Town to each identified priority hazard, in addition to the estimate of likelihood of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

Depending on the hazard and availability of data for analysis, this hazard specific vulnerability assessment also includes information on values at risk, populations at risk, critical facilities and infrastructure, and future development.

Climate Change

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

Climate change adaptation is a key priority of the State of California. The 2018 State of California Multi-Hazard Mitigation Plan stated that climate change is already affecting California. Sea levels have risen by as much as seven inches along the California coast over the last century, increasing erosion and pressure on the state's infrastructure, water supplies, and natural resources. The State has also seen increased average temperatures, more extreme hot days, fewer cold nights, a lengthening of the growing season, shifts in the water cycle with less winter precipitation falling as snow, and earlier runoff of both snowmelt and rainwater in the year. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing.

In Placer County and the Town, the HMPC noted that each year it seems to get a bit warmer each year.

Location and Extent

Climate change is a global phenomenon. It is expected to affect the whole of the Town, Placer County, and State of California. There is no scale to measure the extent of climate change. Climate change exacerbates other hazards, such as drought, extreme heat, flooding, wildfire, and others. The speed of onset of climate change is very slow. The duration of climate change is not yet known, but is feared to be tens to hundreds of years.

Past Occurrences

Climate change has never been directly linked to any declared disasters. While the Town noted that climate change is of concern, no specific impacts of climate change could be recalled. The Town and HMPC members noted that the strength of storms does seem to be increasing and the temperatures are getting hotter. The Town also noted that Public Safety Power Shutoff events have increased – which could be related to climate change.

Vulnerability to and Impacts from Climate Change

The California Adaptation Planning Guide (APG) prepared by California OES and CNRA was developed to provide guidance and support for local governments and regional collaboratives to address the unavoidable consequences of climate change. California's APG: Understanding Regional Characteristics has divided California into 11 different regions based on political boundaries, projected climate impacts, existing environmental setting, socioeconomic factors and regional designations. Placer County falls within the North Sierra Region characterized as a sparsely settled mountainous region where the region's economy is primarily tourism-based. The region is rich in natural resources, biodiversity, and is the source for the majority of water used by the state. This information can be used to guide climate adaptation planning in the Town and Placer County Planning Area.

The California APG: Understanding Regional Characteristics identified the following impacts specific to the North Sierra region in which the Placer County Planning Area is part of:

- Temperature increases
- Increased duration of high temperatures

- Decreased precipitation
- Reduced snowpack
- Reduced tourism
- Ecosystem change
- Sensitive species stress
- Increased wildfire

Future Development

The Town could see population fluctuations as a result of climate impacts relative to those experienced in other regions, and these fluctuations are expected to impact demand for housing and other development. While there are currently no formal studies of specific migration patterns expected to impact the Town and County region, climate-induced migration was recognized within the UNFCCC Conference of Parties Paris Agreement of 2015 and is expected to be the focus of future studies.

Drought & Water Shortage

Likelihood of Future Occurrence–Occasional
Vulnerability–Medium

Hazard Profile and Problem Description

Drought is a complex issue involving many factors—it occurs when a normal amount of precipitation and snow is not available to satisfy an area's usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water is the most critical issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. As the population in the area continues to grow, so will the demand for water.

Location and Extent

Drought and water shortage are regional phenomenon. The whole of the County, as well as the whole of the Town, is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- D0 – Abnormally dry
- D1 – Moderate Drought
- D2 – Severe Drought
- D3 – Extreme drought
- D4 – Exceptional drought

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time, which does not usually affect water shortages and for longer periods. Should a drought last for a long period of time, water shortage becomes a larger issue. Current drought conditions in the Town and the County are shown in Section 4.2.11 of the Base Plan.

Past Occurrences

There have been two state and one federal disaster declaration from drought. This can be seen in Table D-12.

Table D-12 Placer County – State and Federal Drought Disaster Declarations 1950-2020

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Drought	1	2014	1	1977

Source: Cal OES, FEMA

Since drought is a regional phenomenon, past occurrences of drought for the Town are the same as those for the County and includes 4 multi-year droughts since 1950. Details on past drought occurrences can be found in Section 4.2.11 of the Base Plan.

Vulnerability to and Impacts from Drought and Water Shortage

Based on historical information, the occurrence of drought in California, including the Town, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users.

The vulnerability of the Town to drought is Town-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservation measures during extended droughts. During these times, the costs of water can also increase. The increased dry fuels and fuel loads associated with drought conditions can also result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts.

Other qualitative impacts associated with drought in the planning area are those related to water intensive activities such as, municipal usage, commerce, tourism, recreation and agricultural use. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

Water sources for the Town is the Placer County Water District, (PCWD) and Private groundwater wells. The Town also noted that drought causes increase fire hazards around the City, impacts to outdoor activities, dead and fallen trees. The City noted it has no emergency reserve to deal with drought impacts.

Future Development

As the population in the area continues to grow, so will the demand for water. Ongoing planning will be needed by the Town and water agencies to account for population growth and increased future water demands.

Earthquake

Likelihood of Future Occurrence–Occasional
Vulnerability–High

Hazard Profile and Problem Description

An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Earthquakes can cause structural damage, injury, and loss of life, as well as damage to infrastructure networks, such as water, power, gas, communication, and transportation. Earthquakes may also cause collateral emergencies including dam and levee failures, seiches, hazmat incidents, fires, avalanches, and landslides. The degree of damage depends on many interrelated factors. Among these are: the magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surface deposits or bedrock, degree of consolidation of surface deposits, presence of high groundwater, topography, and the design, type, and quality of building construction.

Location and Extent

Since earthquakes are regional events, the whole of the Town is at risk to earthquake. Loomis and the surrounding area at lower risk from significant seismic and geologic hazards. Although portions of western and eastern Placer County are located in a seismically active region, no known faults actually go through any of the cities or towns.

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales, as discussed in Section 4.2.12 of the Base Plan.

Another measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. Seismic shaking is typically the greatest cause of losses to structures during earthquakes. The Town is located in an area where few earthquakes of significant magnitude occur, so both magnitude and intensity of earthquakes are expected to remain low. Seismic shaking maps for the area show the Town falls within a low shake risk.

Past Occurrences

The Town noted no past occurrences of earthquakes or that affected the Town in any meaningful way.

Vulnerability to and Impacts from Earthquake

The combination of plate tectonics and associated California coastal mountain range building geology generates earthquake as a result of the periodic release of tectonic stresses. Placer County's mountainous terrain lies in the center of the North American and Pacific tectonic plate activity. There have been earthquakes as a result of this activity in the historic past, and there will continue to be earthquakes in the future of the California north coastal mountain region.

Fault ruptures itself contributes very little to damage unless the structure or system element crosses the active fault; however, liquefaction can occur further from the source of the earthquake. In general, newer construction is more earthquake resistant than older construction due to enforcement of improved building codes. Manufactured housing is very susceptible to damage because their foundation systems are rarely braced for earthquake motions. Locally generated earthquake motions and associated liquefaction, even from very moderate events, tend to be more damaging to smaller buildings, especially those constructed of unreinforced masonry (URM) and soft story buildings. A number of the buildings in Loomis' downtown are URM. The HMPC was not certain of how many there are or if there are others outside of the downtown area.

The Uniform Building Code (UBC) identifies four seismic zones in the United States. The zones are numbered one through four, with Zone 4 representing the highest level of seismic hazard. The UBC establishes more stringent construction standards for areas within Zones 3 and 4. All of California lies within either Zone 3 or Zone 4. The Town of Loomis is within the less hazardous Zone 3.

Earthquake vulnerability is primarily based on population and the built environment. Urban areas in high seismic hazard zones are the most vulnerable, while uninhabited areas are less vulnerable.

Impacts from earthquake in the Town will vary depending on the fault that the earthquake occurs on, the depth of the earthquake strike, and the intensity of shaking. Large events could cause damages to infrastructure, critical facilities, residential and commercial properties, and possible injuries or loss of life.

Among the most significant effect of an earthquake would likely be to the transportation system in the Town. Local bridges may be susceptible earthquakes. The railroad and freeway may also be affected by earthquakes. Many of the buildings in Loomis are only one and two stories, and may be impacted to a lesser extent. Damage to critical facilities and infrastructure are always a concern during earthquake events.

Earthquake Analysis

Due to the regional effects of an earthquake, a Hazus earthquake analysis was performed on a countywide basis. This can be found in Section 4.3.11 of the Base Plan. While these runs were not done specific to the Town, maps showing damage in the County show greater areas of damage near the cities in the County. This is because more built out urban are the generally the most vulnerable, while more rural and sparsely populated areas are less vulnerable to an earthquake event.

Future Development

Although new growth and development corridors would fall in the area affected by earthquake, given the small chance of major earthquake and the building codes in effect, development in the earthquake area will continue to occur. The Town enforces the state building code, which mandates construction techniques that minimize seismic hazards. Future development in the Town is subject to these building codes.

Flood: 1%/0.2% Annual Chance

Likelihood of Future Occurrence–Occasional/Unlikely
Vulnerability–Medium

Hazard Profile and Problem Description

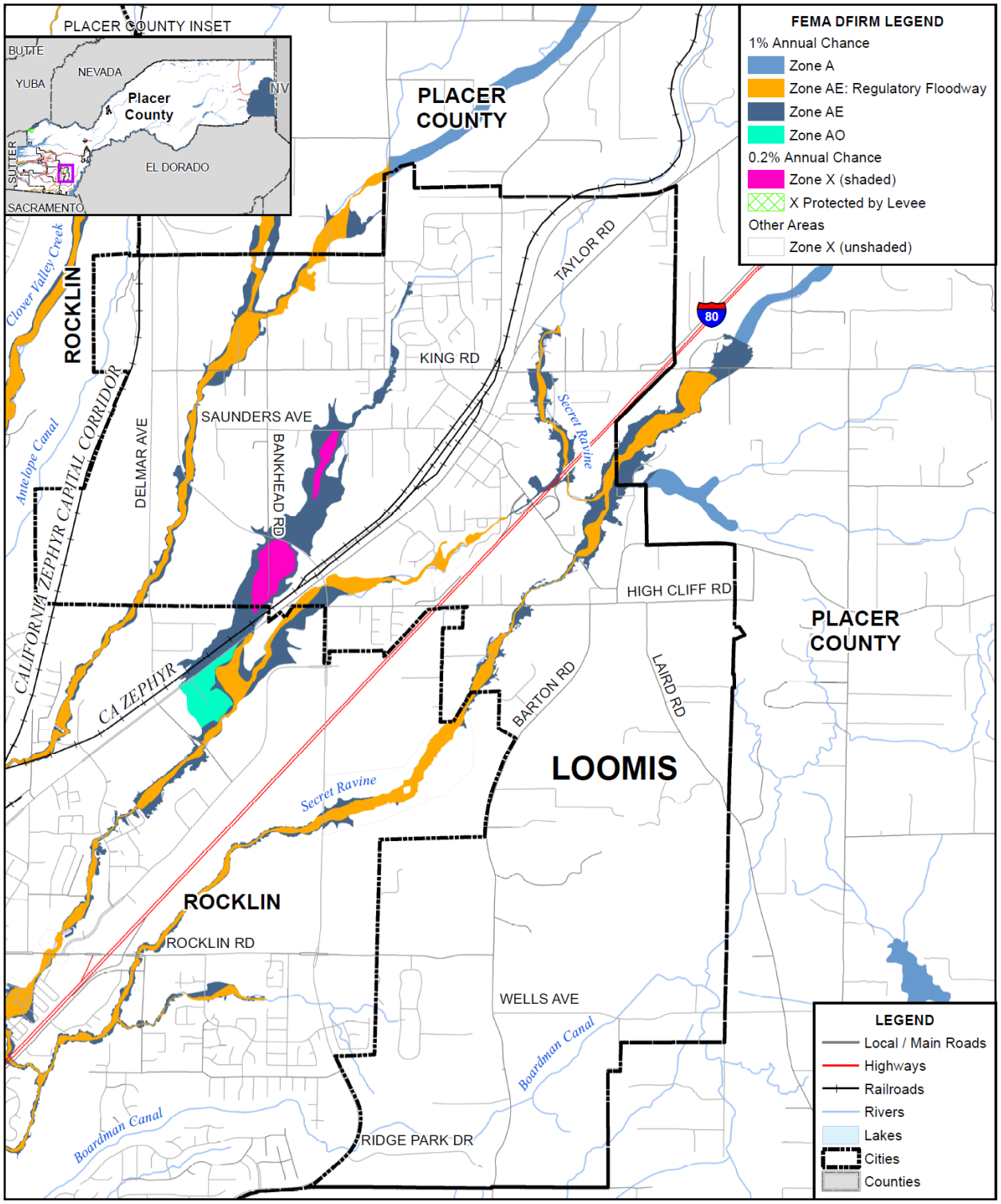
This hazard analyzes the FEMA DFIRM 1% and 0.2% annual chance floods. These tend to be the larger floods that can occur in the County or in the Town, and have caused damages in the past. Flooding is a significant problem in Placer County and the Town. Historically, the Town has been at risk to flooding primarily during the winter and spring months when river systems in the County swell with heavy rainfall and snowmelt runoff. Normally, storm floodwaters are kept within defined limits by a variety of storm drainage and flood control measures. Occasionally, extended heavy rains result in floodwaters that exceed normal high-water boundaries and cause damage. Flooding has occurred both within the 1% and 0.2% annual chance floodplains and in other localized areas.

As previously described in Section 4.2.13 of the Base Plan, the Placer County Planning Area and the Town of Loomis have been subject to historical flooding. Loomis is traversed by several stream systems and is at risk to the 1% and 0.2% flood.

Location and Extent

The Safety Element of Loomis' General Plan notes that flooding has been a minor hazard because of the Town's relatively elevated location compared to downstream localities. However, the DFIRM does identify portions of Loomis that could be inundated in the event of 100- and 500-year floods from several creeks that flow through the Town (Antelope Creek, Secret Ravine, and Sucker Ravine and their tributaries). The Town of Loomis has areas located in the 1% and 0.2% annual chance flood zones. This is seen in Figure D-7.

Figure D-7 Town of Loomis – FEMA DFIRM Flood Zones



Data Source: FEMA DFIRM 11/2/2018, Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-13 details the DFIRM mapped flood zones located within the Town.

Table D-13 Town of Loomis– DFIRM Flood Hazard Zones

Flood Zone	Description	Flood Zone Present in Town of Loomis
A	1% annual chance flooding: No base flood elevations provided	
AE	1% annual chance flooding: Base flood elevations provided	X
AE Floodway	1% annual chance flood: Regulatory floodway; Base flood elevations provided	X
AO	1% annual chance flooding: sheet flow areas. BFEs derived from detailed hydraulic analyses are shown in this zone.	
Shaded X	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood	X
X Protected by Levee	Areas protected by levees from 1% annual chance flood event. Levee protection places these areas in the 0.2% annual chance flood zone.	
X (unshaded)	No flood hazard	X

Source: FEMA

Additionally, flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the Town vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the Town tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the Town tends to have a shorter speed of onset, due to the amount of water that flows through the Town.

Geographical flood extents for the Town from the FEMA DFIRMs are shown in Table D-14.

Table D-14 Town of Loomis – Geographical DFIRM Flood Zone Extents

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance	224	4.9%	155	4.8%	69	5.2%
0.2% Annual Chance	26	0.6%	23	0.7%	3	0.2%
Other Areas	4,310	94.5%	3,068	94.5%	1,243	94.5%
Total	**4,561**	**100.0%**	**3,246**	**100.0%**	**1,315**	**100.0%**

Source: FEMA DFIRM 11/2/2018

Past Occurrences

A list of state and federal disaster declarations for Placer County from flooding is shown on Table D-15. These events also likely affected the Town to some degree.

Table D-15 Placer County – State and Federal Disaster Declarations from Flood 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Flood (including heavy rains and storms)	16	1950, 1955, 1958 (twice), 1962, 1963, 1969, 1973, 1980, 1983, 1986, 1995 (twice), 1997, 2008, 2017	13	1955, 1958, 1962, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 2006 (twice), 2017

Source: Cal OES, FEMA

Vulnerability to and Impacts from Flood

Floods have been a part of the Town's historical past and will continue to be so in the future. During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damages. Predominantly, the effects of flooding are generally confined to areas near the waterways of the County. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat. This threatens structures in the floodplain. Structures can also be damaged from trees falling as a result of water-saturated soils. Electrical power outages happen, and the interruption of power causes major problems. Loss of power is usually a precursor to closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues. People may be swept away in floodwaters, causing injuries or deaths.

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Floods can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services. Standing water can cause damage to crops, roads, foundations, and electrical circuits. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts

Assets at Risk

Based on the vulnerability of Loomis to the flood hazard, the sections that follow describes significant assets at risk in the Town of Loomis. This section includes the values at risk, flooded acres, population at risk, and critical facilities at risk.

Values at Risk

GIS was used to determine the possible impacts of flooding within the Town of Loomis. The methodology described in Section 4.3.12 of the Base Plan was followed in determining structures and values at risk to the 1% (100-year) and 0.2% (500-year) annual chance flood event. Table D-16 is a summary table for the Town of Loomis. Parcel counts, values, estimated contents, and total values in the Town are shown for the 1% and 0.2% annual chance flood zones, as well as for those properties that fall outside of the mapped FEMA DFIRM flood zones. Table D-17 breaks down Table D-16 and shows the property use, improved parcel count, improved values, estimated contents, and total values that fall in FEMA flood zones in the Town.

Table D-16 Town of Loomis – Count and Value of Parcels at Risk in Summary DFIRM Flood Zones

Flood Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard	117	98	$12,400,680	$30,205,234	$21,027,153	$63,633,067
0.2% Annual Chance Flood Hazard	13	12	$1,492,271	$2,725,467	$1,362,734	$5,580,472
Other Areas	2,865	2,442	$395,656,406	$785,637,335	$479,648,228	$1,660,941,969
Loomis Total	**2,995**	**2,552**	**$409,549,357**	**$818,568,036**	**$502,038,115**	**$1,730,155,508**

Source: FEMA 11/2/2018 DFIRM, Placer County 2020 Parcel/Assessor's Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table D-17 Town of Loomis – Count and Values of Parcels at Risk by Detailed Flood Zone and Property Use

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard						
Zone AE Floodway						
Commercial	2	1	$18,447	$64,664	$64,664	$147,775
Miscellaneous	6	0	$162,305	$0	$0	$162,305
Natural / Open Space	3	0	$0	$0	$0	$0
Residential	33	33	$3,417,101	$7,161,302	$3,580,652	$14,159,055
Zone AE Floodway Total	**44**	**34**	**$3,597,853**	**$7,225,966**	**$3,645,316**	**$14,469,135**
Zone AE						

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Commercial	4	2	$3,203,607	$11,784,409	$11,784,409	$26,772,425
Institutional	1	0	$0	$0	$0	$0
Miscellaneous	6	0	$68,628	$0	$0	$68,628
Residential	62	62	$5,530,592	$11,194,859	$5,597,428	$22,322,879
Zone AE Total	**73**	**64**	**$8,802,827**	**$22,979,268**	**$17,381,837**	**$49,163,932**
1% Annual Chance Flood Hazard Total	**117**	**98**	**$12,400,680**	**$30,205,234**	**$21,027,153**	**$63,633,067**
0.2% Annual Chance Flood Hazard						
Zone X (shaded)						
Miscellaneous	1	0	$61,420	$0	$0	$61,420
Residential	12	12	$1,430,851	$2,725,467	$1,362,734	$5,519,052
Zone X (shaded) Total	13	12	$1,492,271	$2,725,467	$1,362,734	$5,580,472
0.2% Annual Chance Flood Hazard Total	**13**	**12**	**$1,492,271**	**$2,725,467**	**$1,362,734**	**$5,580,472**
Other Areas						
Zone X (unshaded)						
Agricultural	1	1	$13,875	$109,235	$109,235	$232,345
Commercial	126	83	$39,496,808	$39,426,597	$39,426,597	$118,350,002
Industrial	132	114	$19,276,129	$54,492,331	$81,738,498	$155,506,958
Institutional	29	16	$2,596,293	$15,229,453	$15,229,453	$33,055,199
Miscellaneous	271	10	$27,861,220	$7,523,815	$7,523,815	$42,908,850
Natural / Open Space	23	4	$1,681,942	$2,385,381	$2,385,381	$6,452,704
Residential	2,283	2,214	$304,730,139	$666,470,523	$333,235,249	$1,304,435,911
Zone X (unshaded) Total	**2,865**	**2,442**	**$395,656,406**	**$785,637,335**	**$479,648,228**	**$1,660,941,969**
Other Areas Total	**2,865**	**2,442**	**$395,656,406**	**$785,637,335**	**$479,648,228**	**$1,660,941,969**
Loomis Grand Total	**2,995**	**2,552**	**$409,549,357**	**$818,568,036**	**$502,038,115**	**$1,730,155,508**

Source: FEMA 11/2/2018 DFIRM, Placer County 2020 Parcel/Assessor's Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table D-18 summarizes Table D-17 above and shows Town of Loomis loss estimates and improved values at risk by FEMA 1% and 0.2% annual chance flood zones.

Table D-18 Town of Loomis – Flood Loss Estimates

Flood Zone	Total Parcel Count	Improved Parcel Count	Improved Structure Value	Estimated Contents Value	Total Value	Loss Estimate	Loss Ratio
1% Annual Chance Flood Hazard	117	98	$30,205,234	$21,027,153	$51,232,387	$10,246,477	0.017%
0.2% Annual Chance Flood Hazard	13	12	$2,725,467	$1,362,734	$4,088,201	$817,640	0.001%
Grand Total	**130**	**110**	**$32,930,701**	**$22,389,887**	**$55,320,588**	**$11,064,117**	**0.02%**

Source: FEMA 11/2/2018 DFIRM, Placer County 2020 Parcel/Assessor's Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

According to Table D-17 and Table D-18, the Town of Loomis has 98 parcels and $51.2 million of structure and contents values or values in the 1% annual chance flood zone, and 12 improved parcels and $4.1 million of structure and contents values in the 0.2% annual chance flood zone. These values can be refined a step further. Applying the 20 percent damage factor as previously described in Section 4.3.10 of the Base Plan, there is a 1% chance in any given year of a flood event causing $10.2 million in damage and a 0.2% chance in any given year of a flood event causing $0.8 million in damage in the Town of Loomis. The loss ratio of 0.017% and 0.001% indicates that flood losses for 1% and 0.2% annual chance flooding, respectively, would be limited and the Town would be able to recover quickly.

Flooded Acres

Also of interest is the land area affected by the various flood zones. The following is an analysis of flooded acres in the Town in comparison to total area within the Town limits. The same methodology, as discussed in Section 4.3.12 of the Base Plan, was used for the Town of Loomis as well as for the County as a whole. Table D-19 represents a detailed and summary analysis of total acres for each FEMA DFIRM flood zone in the Town.

Table D-19 Town of Loomis – Flooded Acres by Flood Zone

Flood Zone / Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance Flood Hazard						
Zone A						
Agricultural	0	0.00%	0	0.00%	0	0.00%
Commercial	0	0.00%	0	0.00%	0	0.00%
Industrial	0	0.00%	0	0.00%	0	0.00%
Institutional	0	0.00%	0	0.00%	0	0.00%
Miscellaneous	0	0.00%	0	0.00%	0	0.00%
Natural / Open Space	0	0.00%	0	0.00%	0	0.00%
Residential	1	0.000%	1	0.001%	0	0.00%
Zone A Total	**1**	**0.000%**	**1**	**0.001%**	**0**	**0.00%**
Zone AE Floodway						
Agricultural	0	0.00%	0	0.00%	0	0.00%
Commercial	10	0.001%	2	0.001%	7	0.001%
Industrial	0	0.00%	0	0.00%	0	0.00%
Institutional	2	0.000%	0	0.000%	2	0.000%
Miscellaneous	10	0.001%	0	0.00%	10	0.001%
Natural / Open Space	8	0.001%	1	0.001%	7	0.001%
Residential	61	0.007%	57	0.032%	4	0.001%
Zone AE Floodway Total	**91**	**0.010%**	**61**	**0.034%**	**30**	**0.004%**
Zone AE						
Agricultural	0	0.00%	0	0.00%	0	0.00%
Commercial	15	0.002%	6	0.003%	9	0.001%
Industrial	1	0.000%	1	0.000%	0	0.00%
Institutional	2	0.000%	0	0.000%	2	0.000%
Miscellaneous	21	0.002%	0		21	0.003%
Natural / Open Space	1	0.000%	1	0.000%	0	0.000%
Residential	93	0.010%	86	0.048%	7	0.001%
Zone AE Total	**132**	**0.015%**	**93**	**0.052%**	**39**	**0.005%**
Zone AO						
Agricultural	0	0.00%	0	0.00%	0	0.00%
Commercial	0	0.00%	0	0.00%	0	0.00%
Industrial	0	0.00%	0	0.00%	0	0.00%

Flood Zone / Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Institutional	0	0.00%	0	0.00%	0	0.00%
Miscellaneous	0	0.00%	0	0.00%	0	0.00%
Natural / Open Space	0	0.00%	0	0.00%	0	0.00%
Residential	0	0.00%	0	0.00%	0	0.00%
Zone AO Total	**0**	**0.00%**	**0**	**0.00%**	**0**	**0.00%**
1% Annual Chance Flood Hazard Total	**224**	**0.025%**	**155**	**0.086%**	**69**	**0.010%**
0.2% Annual Chance Flood Hazard						
Zone X (shaded)						
Agricultural	0	0.00%	0	0.00%	0	0.00%
Commercial	0	0.00%	0	0.00%	0	0.00%
Industrial	1	0.000%	1	0.000%	0	0.00%
Institutional	0	0.00%	0	0.00%	0	0.00%
Miscellaneous	1	0.000%	0	0.00%	1	0.000%
Natural / Open Space	0	0.00%	0	0.00%	0	0.00%
Residential	25	0.003%	23	0.013%	2	0.000%
Zone X (shaded) Total	**26**	**0.003%**	**23**	**0.013%**	**3**	**0.000%**
0.2% Annual Chance Flood Hazard Total	**26**	**0.003%**	**23**	**0.013%**	**3**	**0.000%**
Other Areas						
Zone X (unshaded)						
Agricultural	6	0.001%	6	0.003%	0	
Commercial	231	0.026%	88	0.049%	143	0.020%
Industrial	113	0.013%	84	0.047%	29	0.004%
Institutional	143	0.016%	63	0.035%	80	0.011%
Miscellaneous	848	0.094%	42	0.023%	806	0.112%
Natural / Open Space	132	0.015%	63	0.035%	69	0.010%
Residential	2,837	0.316%	2,722	1.512%	115	0.016%
Zone X (unshaded) Total	**4,310**	**0.479%**	**3,068**	**1.704%**	**1,243**	**0.173%**
Other Areas Total	**4,310**	**0.479%**	**3,068**	**1.704%**	**1,243**	**0.173%**

Flood Zone / Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Loomis Grand Total	**4,561**	**0.507%**	**3,246**	**1.803%**	**1,315**	**0.183%**

Source: FEMA 11/2/2018 DFIRM

Population at Risk

The DFIRM flood zones were overlayed on the parcel layer. Those residential parcel centroids that intersect the flood zones were counted and multiplied by the 2010 Census Bureau average household factors for Loomis – 2.60. According to this analysis, there is a total population of 247 and 31 residents of the Town at risk to flooding in the 1% and 0.2% annual chance floodplains, respectively. This is shown in Table D-20.

Table D-20 Town of Loomis – Count of Improved Residential Parcels and Population by Flood Zone

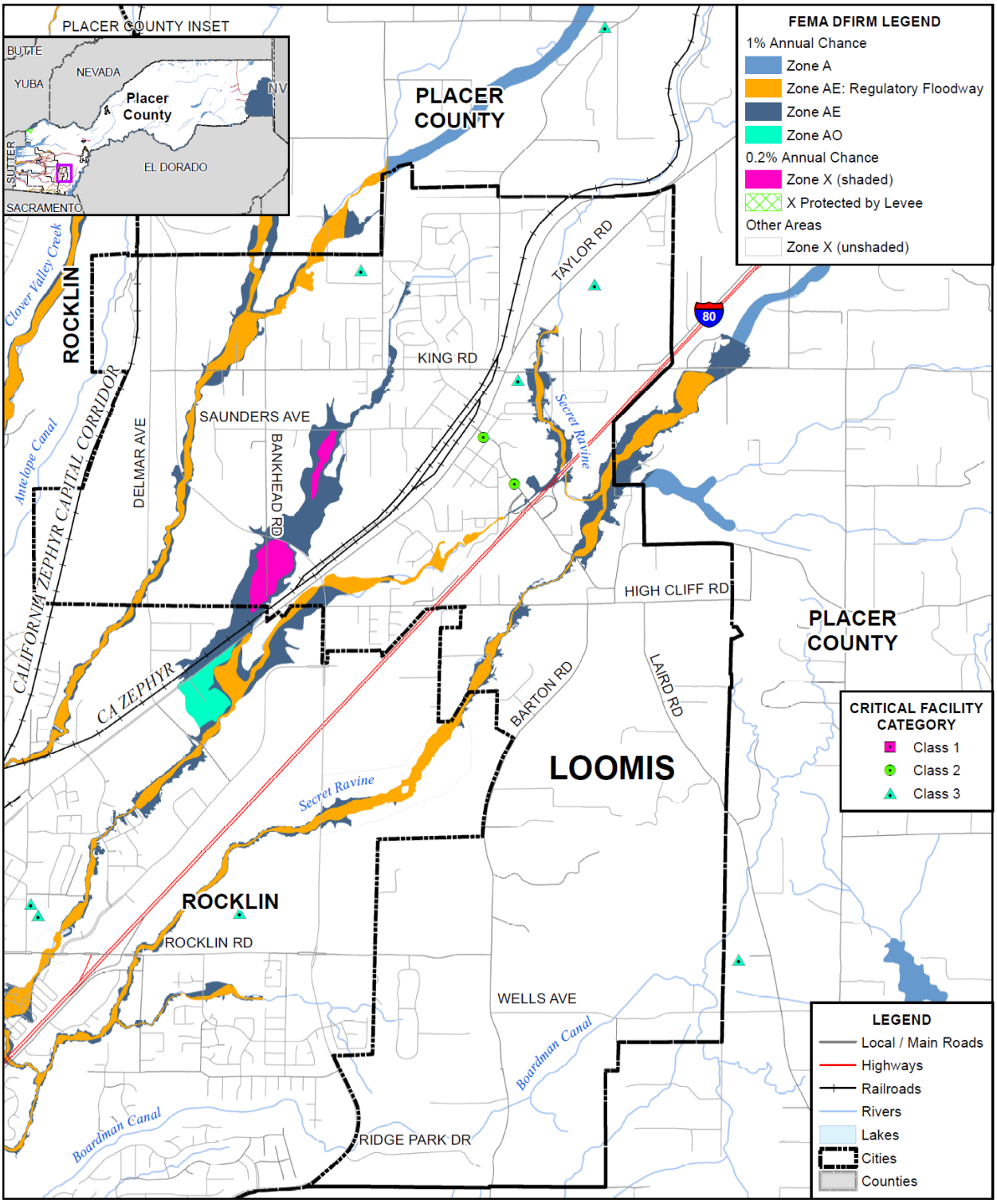
Jurisdiction	1% Annual Chance		0.2% Annual Chance	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Loomis	95	247	12	31

Source: FEMA DFIRM 11/2/2018, Placer County 2020 Parcel/Assessor's Data, US Census Bureau

Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Loomis in identified DFIRM flood zones. Critical facilities in a FHSZ in the City of Loomis are shown in Figure D-12 and detailed in Table D-30. As shown, no critical facilities fall in any mapped DFIRM flood zone. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

Figure D-8 Town of Loomis – Critical Facilities in DFIRM Flood Zones



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Data Source: FEMA DFIRM 11/2/2018, Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-21 Town of Loomis – Critical Facilities by DFIRM Flood Zone

Flood Zone	Critical Facility Class	Critical Facility Type	Facility Count
Other Areas			
Zone X (unshaded)	Class 2	Fire Station	1
		Police Station	1
	Class 3	School	3
Zone X (unshaded) Total			**5**
Other Areas Total			**5**
Loomis Total			**5**

Source: CAL FIRE, Placer County

Insurance Coverage, Claims Paid, and Repetitive Losses

The Town of Loomis joined the National Flood Insurance Program (NFIP) on December 29, 1986. The Town does not participate in CRS. NFIP Insurance data indicates that as of August 12, 2020, there were 58 flood insurance policies in force in the Town with $15,738,400 of coverage. Of the 58 policies, 55 were residential and 3 were nonresidential; 39 of the policies were in A zones (the remaining 19 were in B, C, and X zones). There have been 14 historical claims for flood losses totaling $365,985; 10 of these were for policies located in the A zones and 4 were associated with standard policies located in B, C, or X zones. NFIP data further indicates that there are 3 repetitive loss (RL) buildings. No severe repetitive loss (SRL) properties exist in the Town.

Based on this analysis of insurance coverage, the Town has values at risk to the 1% annual chance and greater floods. Of the 98 improved parcels within the 1% annual chance flood zone, only 39 (or 33.9 percent) of those parcels maintain flood insurance. This can be seen on Table D-22.

Table D-22 Town of Loomis – Percentage of Policy Holders to Improved Parcels in the 1% Annual Chance Floodplain

Jurisdiction	Improved Parcels in SFHA (1% Annual Chance) Floodplain*	Insurance Policies in the SFHA (1% Annual Chance) Floodplain	Percentage of 1% Annual Chance Floodplain Parcels Currently Insured
Town of Loomis	98	39	33.9%

Source: FEMA DFIRM 11/2/2018, Placer County 2020 Parcel/Assessor's Data

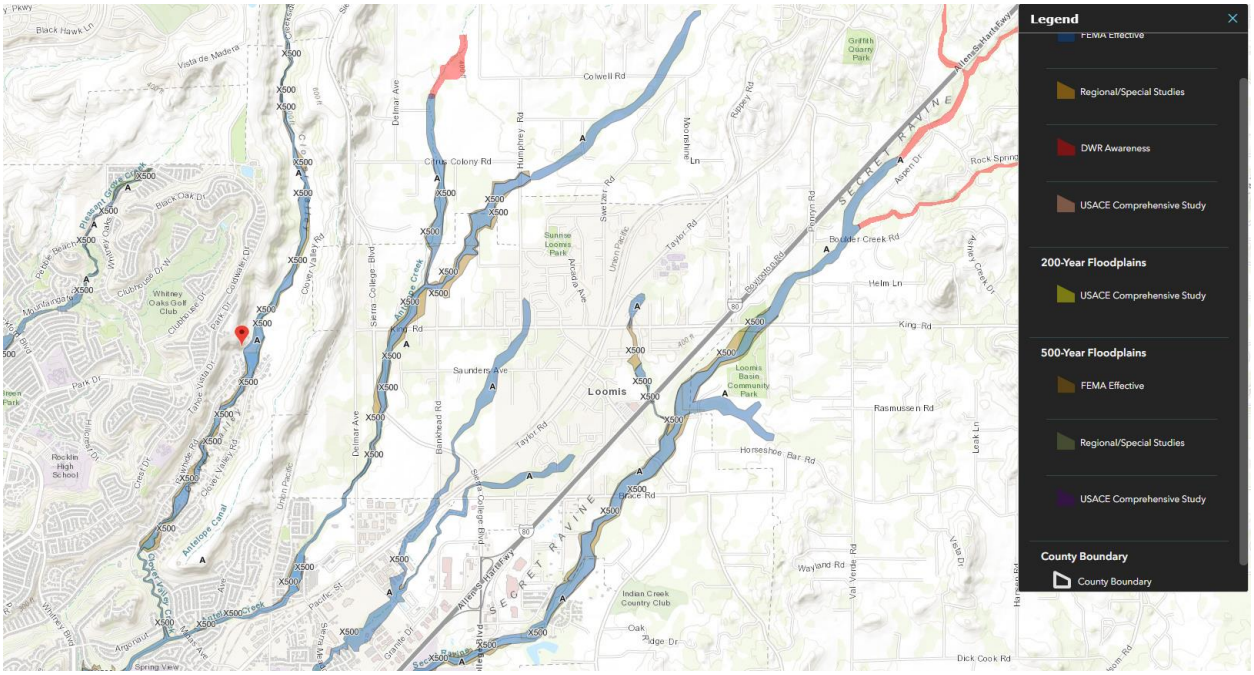
California Department of Water Resources Best Available Maps (BAM)

The FEMA regulatory maps provide just one perspective on flood risks in Placer County. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed. This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements.

The value in the BAMs is that they provide a bigger picture view of potential flood risk to the Town than that provided in the FEMA DFIRMs. The BAM map for Loomis is shown in Figure D-9.

Figure D-9 Town of Loomis – Best Available Map



Source: California DWR

Legend explanation: Blue - FEMA 1%, Orange – Local 1% (developed from local agencies), Red – DWR 1%r (Awareness floodplains identify the 1% annual chance flood hazard areas using approximate assessment procedures.), Pink – USACE 1% (2002 Sac and San Joaquin River Basins Comp Study), Yellow – USACE 0.5% (2002 Sac and San Joaquin River Basins Comp Study), Tan – FEMA 0.2%, Grey – Local 0.2% (developed from local agencies), Purple – USACE 0.2% (2002 Sac and San Joaquin River Basins Comp Study).

Future Development

The potential for flooding may increase as floodwaters are channeled due to land development. Such changes can exacerbate flooding problems inside and outside of natural floodplains by altering or confining natural drainage channels. Floodplain modeling and master planning should be based on build out property use to ensure that all new development remains safe from future flooding. While local floodplain

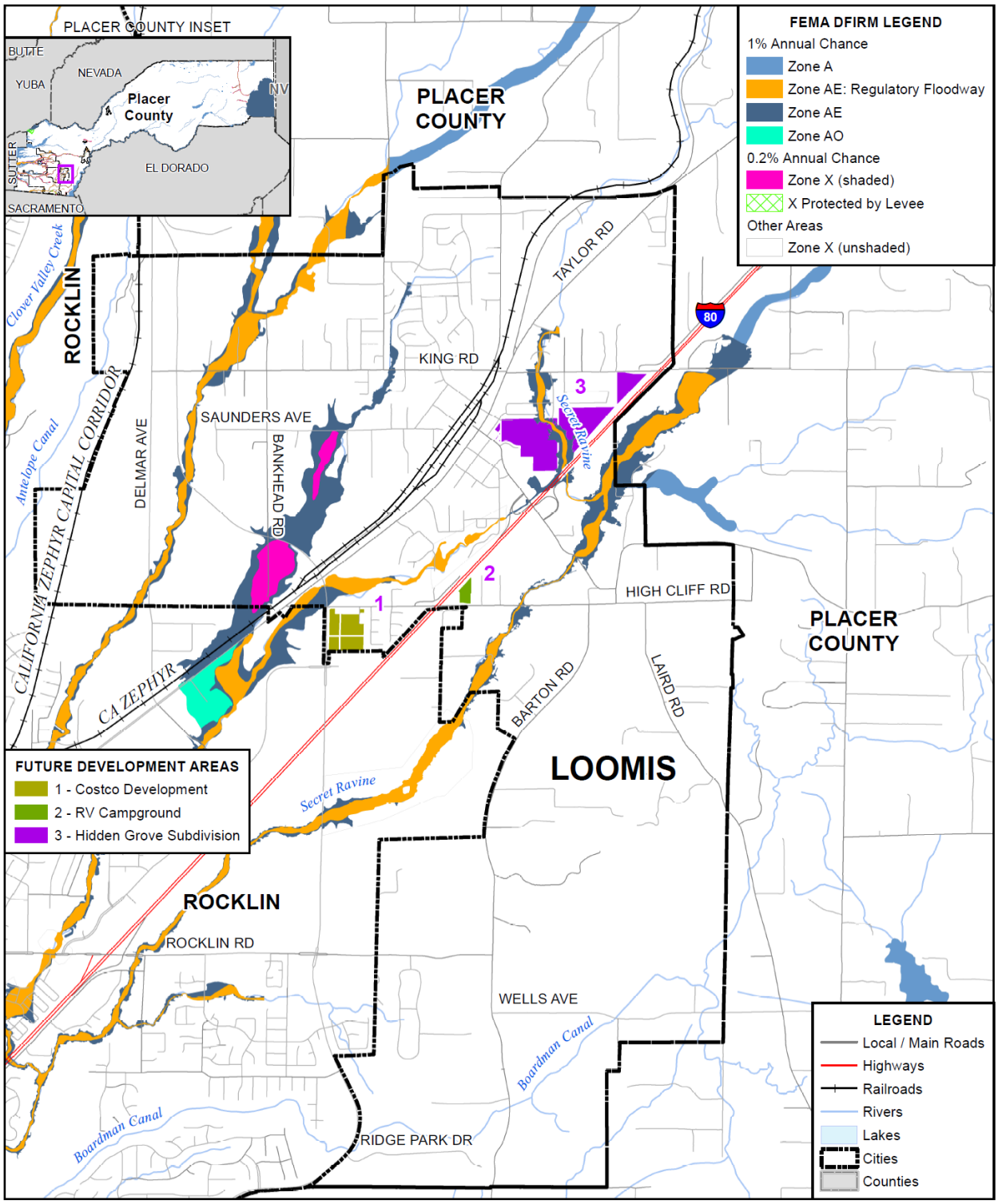
management, stormwater management, and water quality regulations and policies address these changes on a site-by-site basis, their cumulative effects can have a negative impact on the overall floodplain.

Development in the floodplain is discouraged and required to obtain approval from FEMA for modifications in the floodplain.

GIS Analysis

The Town provided Future Development Areas were used as the basis for the inventory of future development areas for the Town. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-10 shows the locations of future development areas the Town is planning to develop on the FEMA DFIRM. As shown on Figure D-10, no future development areas fall in DFIRM flood zones, as such no tabular analysis was performed.

Figure D-10 Town of Loomis – Future Development Areas in DFIRM Flood Zones



Data Source: FEMA DFIRM 11/2/2018, Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Flood: Localized Stormwater Flooding

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

Flooding occurs in areas other than the FEMA mapped 1% and 0.2% annual chance floodplains. Flooding may be from drainages not studied by FEMA, lack of or inadequate drainage infrastructure, or inadequate maintenance. Localized, stormwater flooding occurs throughout the County during the rainy season from November through April. Prolonged heavy rainfall contributes to a large volume of runoff resulting in high peak flows of moderate duration.

Location and Extent

The Town of Loomis is subject to localized flooding throughout the Town. Flood extents are usually measured in areas affected, velocity of flooding, and depths of flooding. Expected flood depths in the Town vary by location. Flood durations in the Town tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Localized flooding in the Town tends to have a shorter speed of onset, especially when antecedent rainfall has soaked the ground and reduced its capacity to absorb additional moisture.

Local drainage problems exist because of outdated, inadequately-sized culverts and bridges that impede high water flows, including culverts under Interstate 80; the Horseshoe Bar Road crossing over Secret Ravine; the railroad and Taylor Road crossing of Sucker Ravine; and crossings of Antelope Creek and its tributaries.

Past Occurrences

The Town noted the following past occurrences of localized flooding:

In the 1995 floods, local flooding did cause damage to the floors of a few buildings. The 2005 New Year's Eve flooding created significant problems in various areas of the Town. A small, localized flooding event in November 2020 occurred due to a blockage in canal running under Arcadia street. A small amount of damage (under $25,000) was reported.

Vulnerability to and Impacts from Localized Flooding

Historically, much of the growth in the Town and County has occurred adjacent to streams, resulting in significant damages to property, and losses from disruption of community activities when the streams overflow. Additional development in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater runoff.

The Town tracks localized flooding areas. Affected localized flood areas identified by the Town of Loomis are summarized in Table D-23.

Table D-23 Town of Loomis – List of Localized Flooding Problem Areas

Area Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Debris	Downed Trees
Bank erosion on King Rd at Antelope Creek			Yes				
Various minor flood area		Sink holes					

Source: Town of Loomis

Primary concerns associated with stormwater flooding include impacts to infrastructure that provides a means of ingress and egress throughout the community. Ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Objects can also be buried or destroyed through sediment deposition. Floodwaters can break utility lines and interrupt services. Standing water can cause damage to crops, roads, and foundations. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

Future Development

Future development in the Town will add more impervious surfaces causing an increase in stormwater runoff and the continued need to drain these waters. The Town will need to be proactive to ensure that increased development has proper siting and drainage for stormwaters. The risk of localized flooding to future development can also be minimized by accurate recordkeeping of repetitive localized storm activity. Mitigating the root causes of the localized stormwater flooding will reduce future risks of losses.

Pandemic

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

According to the World Health Organization (WHO), a disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. A pandemic may occur when a new virus appears against which the human population has no immunity.

A pandemic occurs when a new virus emerges for which people have little or no immunity, and for which there is no vaccine. This disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in a very short time. The U.S. Centers for Disease Control and Prevention has been working closely with other countries and the World Health Organization to strengthen systems to detect outbreaks of that might cause a pandemic and to assist with pandemic planning and preparation. An especially severe a pandemic could lead to high levels of illness, death, social disruption, and economic loss.

Location and Extent

During a pandemic, the whole of the Town, County, and surrounding region is at risk, as pandemic is a regional, national, and international event. The speed of onset of pandemic is usually short, while the duration is variable, but can last for more than a year as shown in the 1918/1919 Spanish Flu and the current COVID-19 pandemic. There is no scientific scale to measure the magnitude of pandemic. Pandemics are usually measured in numbers affected by the pandemic, and by number who die from complications from the pandemic.

Past Occurrences

There has been one state and federal disaster declaration due to pandemic, as shown in Table D-24.

Table D-24 Placer County – State and Federal Pandemic Disaster Declarations 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Pandemic	1	2020	1	2020

Source: Cal OES, FEMA

The 20th century saw three outbreaks of pandemic flu.

- The **1918-1919 Influenza Pandemic (H1N1)**
- The **February 1957-1958 Influenza Pandemic (H2N2)**
- The **1968 Influenza Pandemic (H3N2)**

To date, the 21st century has seen two acknowledged pandemics.

- **2009 Swine Flu (H1N1**)
- **2019/2020 COVID 19**

The HMPC noted that in terms of impacts to the Town, a few smaller businesses closed and a small decrease in sales tax revenue occurred. Those impacts were relatively minor, however.

Vulnerability to and Impacts from Pandemic

Pandemic has and will continue to have impacts on human health in the region. A pandemic occurs when a new virus emerges for which there is little or no immunity in the human population; the virus causes serious illness and spreads easily from person-to-person worldwide. There are several strategies that public health officials can use to combat a pandemic. Constant surveillance regarding current pandemic, use of infection control techniques, and administration of vaccines once they become available. Citizens can help prevent spread of a pandemic by staying home, or "self-quarantining," if they suspect they are infected. Pandemic does not affect the buildings, critical facilities, and infrastructure in the Town. Pandemic can have varying levels of impact to the citizens of the Town and greater County, depending on the nature of the pandemic.

Impacts could range from school and business closings to the interruption of basic services such as public transportation, health care, and the delivery of food and essential medicines. Hospitalizations and deaths can occur, especially to the elderly or those with pre-existing underlying conditions. As seen with Covid-19, multiple businesses were forced to close temporarily (some permanently) an unemployment rose significantly. Supply chains for food can be interrupted. Prisons may need to release prisoners to comply with social distance standards.

The Town's biggest vulnerabilities from COVID-19 is the potential impact to staff – particularly Public Works. If one of the Public Works employees got sick, the department would need to potentially quarantine the entire department. This actually happened twice in 2020/2021. Other vulnerabilities are the ongoing economic impact to the Town with a loss of sales tax revenue.

Future Development

Future development is not expected to be significantly impacted by this hazard, though population growth in the Town could increase exposure to a pandemic, and increase the ability of each disease to be transmitted among the population of the Town. If the median age of Town residents continues to increase, vulnerability to pandemic diseases may increase, due to the fact that these diseases are often more deadly to senior citizens.

Severe Weather: Heavy Rains and Storms

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile and Problem Description

Storms in the Town occur annually and are generally characterized by heavy rain often accompanied by strong winds and sometimes lightning and hail. Approximately 10 percent of the thunderstorms that occur each year in the United States are classified as severe. A thunderstorm is classified as severe when it contains one or more of the following phenomena: hail that is three-quarters of an inch or greater, winds in excess of 50 knots (57.5 mph), or a tornado. Heavy precipitation in the Town falls mainly in the fall, winter, and spring months. Wind often accompanies these storms; hail and lightning are rare in the Town.

Location and Extent

Heavy rain events occur on a regional basis. Rains and storms can occur in any location of the Town. All portions of the Town are at risk to heavy rains. Most of the severe rains occur during the fall, winter, and spring months. There is no scale by which heavy rains and severe storms are measured. Magnitude of storms is measured often in rainfall and damages. The speed of onset of heavy rains can be short, but accurate weather prediction mechanisms often let the public know of upcoming events. Hail and lightning are rare in the Town and Placer County. Duration of severe storms in California, Placer County, and the Town can range from minutes to hours to days. Information on precipitation extremes can be found in Section 4.2.3 of the Base Plan.

Past Occurrences

According to historical hazard data, severe weather, including heavy rains and storms, is an annual occurrence in the Town. This is the cause of many of the federal disaster declarations related to flooding.

Vulnerability to and Impacts from Heavy Rain and Storms

Heavy rain and severe storms are the most frequent type of severe weather occurrences in the Town. These events can cause significant and localized flooding. Elongated events, or events that occur during times where the ground is already saturated can cause 1% and 0.2% annual chance flooding. Wind often accompanies these storms and has caused damage in the past. Hail and lightning are rare in the Town, but also can cause damage, with lightning occasionally igniting wildfires.

Actual damage associated with the effects of severe weather include impacts to property, critical facilities (such as utilities), and life safety. Heavy rains and storms often result in flooding creating significant issues. Roads can become impassable and ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Floodwaters and downed trees can break utilities and interrupt services.

Future Development

Building codes in the Town ensure that new development is built to current building standards, which should reduce the risk to future development in the Town from heavy rains and storms. New critical facilities such as communications towers and others should be built to withstand hail damage, lightning, and thunderstorm winds. With adherence to development standards, future losses to new development should be minimal.

Wildfire

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

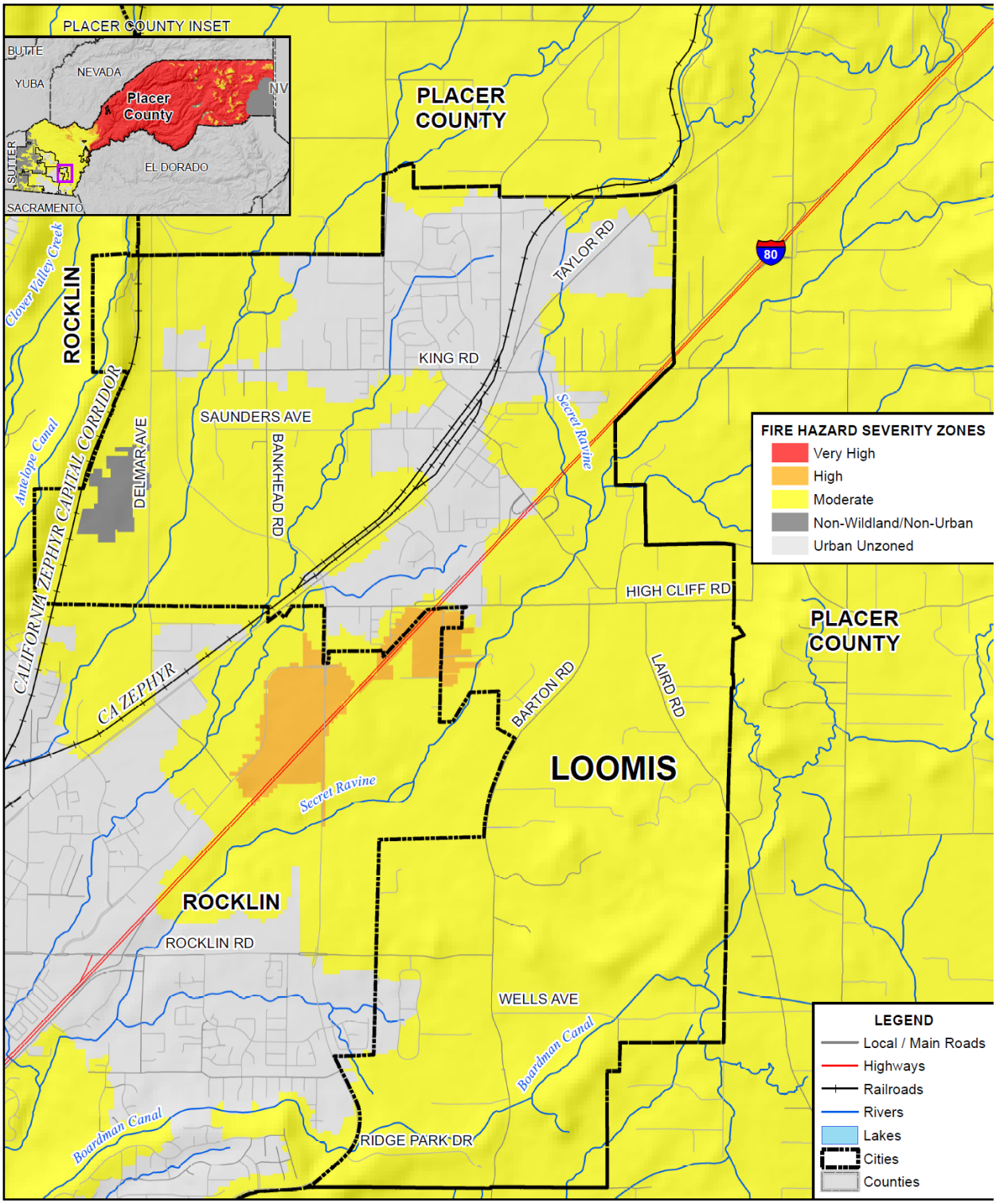
Hazard Profile and Problem Description

Wildland fire and the risk of a conflagration is an ongoing concern for the Town of Loomis. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of the ecosystem. Wildland fires affect grass, forest, and brushlands, as well as any structures located within them. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These high winds can result in red flag days, and can result in Public Safety Power Shutoff (PSPS) events in the Town. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urban areas.

Location and Extent

Wildfire can affect all areas of the Town. CAL FIRE has estimated that the risk varies across the Town and has created maps showing risk variance. Following the methodology described in Section 4.3.19 of the Base Plan, wildfire maps for the Town of Loomis were created. Figure D-11 shows the CAL FIRE FHSZ in the Town. As shown on the maps, fire hazard severity zones within the Town range from urban unzoned to high.

Figure D-11 Town of Loomis – Fire Hazard Severity Zone



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COUNTY OF Placer

Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Wildfires tend to be measured in structure damages, injuries, and loss of life as well as on acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time, or may have durations lasting for a week or more. Geographical FHSZ extent from CAL FIRE is shown in Table D-25.

Table D-25 Town of Loomis – Geographical FHSZ Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	0	0.00%	0	0.00%	0	0.00%
High	24	0.5%	19	0.6%	5	0.4%
Moderate	3,472	76.1%	2,538	78.2%	934	71.0%
Non-Wildland/non-Urban	46	1.0%	30	0.9%	16	1.2%
Urban Unzoned	1,019	22.3%	660	20.3%	359	27.3%
Total	**4,561**	**100.0%**	**3,246**	**100.0%**	**1,315**	**100.0%**

Source: CAL FIRE

Past Occurrences

There has been six state and five federal disaster declaration due to wildfire, as shown in Table D-26.

Table D-26 Placer County – State and Federal Wildfire Disaster Declarations 1950-2020

Disaster Type	Federal Declarations		State Declarations	
	Count	Years	Count	Years
Fire	5	1961, 1965, 1973, 1987, 2010	6	2002, 2004, 2008, 2009, 2014 (twice)

Source: Cal OES, FEMA

Although small grass fires are common in the planning area, they have historically been limited in size by prompt emergency response. In 2002 the town was impacted by the Sierra Fire which burned 900 acres, including six structures. More than 100 homes were evacuated and over 1,000 homes were threatened in both Loomis and Granite Bay. The structural fire hazard, caused largely by human activities, is greatest in areas containing older buildings that do not meet current building codes.

Though not directly affected by any of the recent wildfires, the Town has been significantly impacted by poor air quality due to nearby fires like the Napa and Santa Rosa fires.

Vulnerability to and Impacts from Wildfire

The wildfire hazard is one of the highest priority hazards in the County and Town, and is the hazard with the greatest potential for catastrophic loss. High fuel loads in the County and Cities, along with geographical and topographical features, create the potential for both natural and human-caused fires that

can result in loss of life and property. These factors, combined with natural weather conditions common to the area, including periods of drought, high temperatures, low relative humidity, and periodic winds, can result in frequent and sometimes catastrophic fires. The more urbanized areas within the County are not immune from fire. The dry vegetation and hot and sometimes windy weather, combined with continued growth in the WUI areas, results in an increase in the number of ignitions. Any fire, once ignited, has the potential to quickly become a large, out-of-control fire. As development continues throughout the County and Town, especially in these interface areas, the risk and vulnerability to wildfires will likely increase.

Loomis is not immune to numerous types of grass and brush fires and any one of them may accelerate into an urban interface wildfire. Such a situation could lead to evacuation of large portions of the population and the potential for significant loss of personal property, structures, and open lands. The natural fuels available in or near the Town vary greatly in the rate and intensity of burning. Fires in heavy brush and stands of trees burn with great intensity but more slowly than in dry grass and leaves. Dense fuels will propagate fire better than sparse fuels. The HMPC noted that the biggest areas of concerns are on the south side of the freeway and the areas on both side of Sierra College Blvd., north of Taylor Road.

Potential impacts from wildfire include loss of life and injuries; damage to structures and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Wildfires can cause short-term and long-term disruption to the Town. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the Town by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the Town; smoke and air pollution from wildfires can be a severe health hazard.

Although the physical damages and casualties arising from wildland-urban interface fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. Recently, the threat of wildfire, combined with the potential for high winds, heat, and low humidity, has caused PG&E to initiate a PSPS which can also significantly impact a community through loss of services, business closures, and other impacts associated with loss of power for an extended period. There is one senior center in Town that would be negatively impacted with a PSPS. The stoplight-controlled intersections did not have batteries for backup, but those have been resolved. Future PSPS concerns are the potential impacts to different business sectors: loss of product at grocery stores; loss of product at restaurants; and the inability for businesses to operate. The Town noted only one PSPS event, and that only lasted for a few hours.

In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

Based on the vulnerability of the Town of Loomis to the wildfire hazard, the sections that follow describes significant assets at risk in the Town.

Assets at Risk

Based on the vulnerability of Loomis to the wildfire hazard, the sections that follow describes significant assets at risk in the Town of Loomis. This section includes the values at risk, population at risk, and critical facilities at risk.

Values at Risk

GIS was used to determine the possible impacts of wildfire within the Town of Loomis. The methodology described in Section 4.3.19 of the Base Plan was followed in determining structures and values at risk in fire hazard severity zones. Summary analysis results for Loomis are shown in Table D-27, which summarizes total parcel counts, improved parcel counts and their structure values by fire hazard severity zone.

Table D-27 Town of Loomis – Count and Value of Parcels by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
High	37	27	$2,940,043	$7,221,400	$3,610,697	$13,772,140
Moderate	1,288	1,074	$234,388,266	$454,276,302	$250,620,297	$939,284,865
Non-Wildland/Non-Urban	7	6	$894,956	$1,176,959	$855,411	$2,927,326
Urban Unzoned	1,663	1,445	$171,326,092	$355,893,375	$246,951,710	$774,171,177
Loomis Total	**2,995**	**2,552**	**$409,549,357**	**$818,568,036**	**$502,038,115**	**$1,730,155,508**

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Table D-28 breaks out the Table D-27 by adding the property use details by fire hazard severity zone for the Town.

Table D-28 Town of Loomis – Count and Value of Parcels by Fire Hazard Severity Zone and Property Use

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
High						
Agricultural	0	0	$0	$0	$0	$0
Commercial	0	0	$0	$0	$0	$0
Industrial	0	0	$0	$0	$0	$0
Institutional	0	0	$0	$0	$0	$0
Miscellaneous	1	0	$97,619	$0	$0	$97,619
Natural / Open Space	2	0	$0	$0	$0	$0
Residential	34	27	$2,842,424	$7,221,400	$3,610,697	$13,674,521

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
High Total	**37**	**27**	**$2,940,043**	**$7,221,400**	**$3,610,697**	**$13,772,140**
Moderate						
Agricultural	0	0	$0	$0	$0	$0
Commercial	44	23	$21,685,242	$21,081,075	$21,081,075	$63,847,392
Industrial	11	5	$1,933,145	$2,555,099	$3,832,649	$8,320,893
Institutional	13	10	$1,228,118	$10,901,166	$10,901,166	$23,030,450
Miscellaneous	166	9	$25,220,677	$7,486,467	$7,486,467	$40,193,611
Natural / Open Space	9	4	$1,681,942	$2,385,381	$2,385,381	$6,452,704
Residential	1,045	1,023	$182,639,142	$409,867,114	$204,933,559	$797,439,815
Moderate Total	**1,288**	**1,074**	**$234,388,266**	**$454,276,302**	**$250,620,297**	**$939,284,865**
Non-Wildland/Non-Urban						
Agricultural	1	1	$13,875	$109,235	$109,235	$232,345
Commercial	3	2	$629,518	$424,629	$424,629	$1,478,776
Industrial	0	0	$0	$0	$0	$0
Institutional	0	0	$0	$0	$0	$0
Miscellaneous	0	0	$0	$0	$0	$0
Natural / Open Space	0	0	$0	$0	$0	$0
Residential	3	3	$251,563	$643,095	$321,547	$1,216,205
Non-Wildland/Non-Urban Total	**7**	**6**	**$894,956**	**$1,176,959**	**$855,411**	**$2,927,326**
Urban Unzoned						
Agricultural	0	0	$0	$0	$0	$0
Commercial	85	61	$20,404,102	$29,769,966	$29,769,966	$79,944,034
Industrial	121	109	$17,342,984	$51,937,232	$77,905,849	$147,186,065
Institutional	17	6	$1,368,175	$4,328,287	$4,328,287	$10,024,749
Miscellaneous	117	1	$2,835,277	$37,348	$37,348	$2,909,973
Natural / Open Space	15	0	$0	$0	$0	$0
Residential	1,308	1,268	$129,375,554	$269,820,542	$134,910,260	$534,106,356
Urban Unzoned Total	**1,663**	**1,445**	**$171,326,092**	**$355,893,375**	**$246,951,710**	**$774,171,177**
Loomis Total	**2,995**	**2,552**	**$409,549,357**	**$818,568,036**	**$502,038,115**	**$1,730,155,508**

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Population at Risk

The FHSZ dataset was overlayed on the parcel layer. Those residential parcel centroids that intersect the FHSZs were counted and multiplied by the 2010 Census Bureau average household factors for the Town of Loomis – 2.60. According to this analysis, there is a total population of 78 residents of Loomis at risk to moderate or higher FHSZs. This is shown in Table D-29.

Table D-29 Town of Loomis – Count of Improved Residential Parcels and Population by Fire Hazard Severity Zone

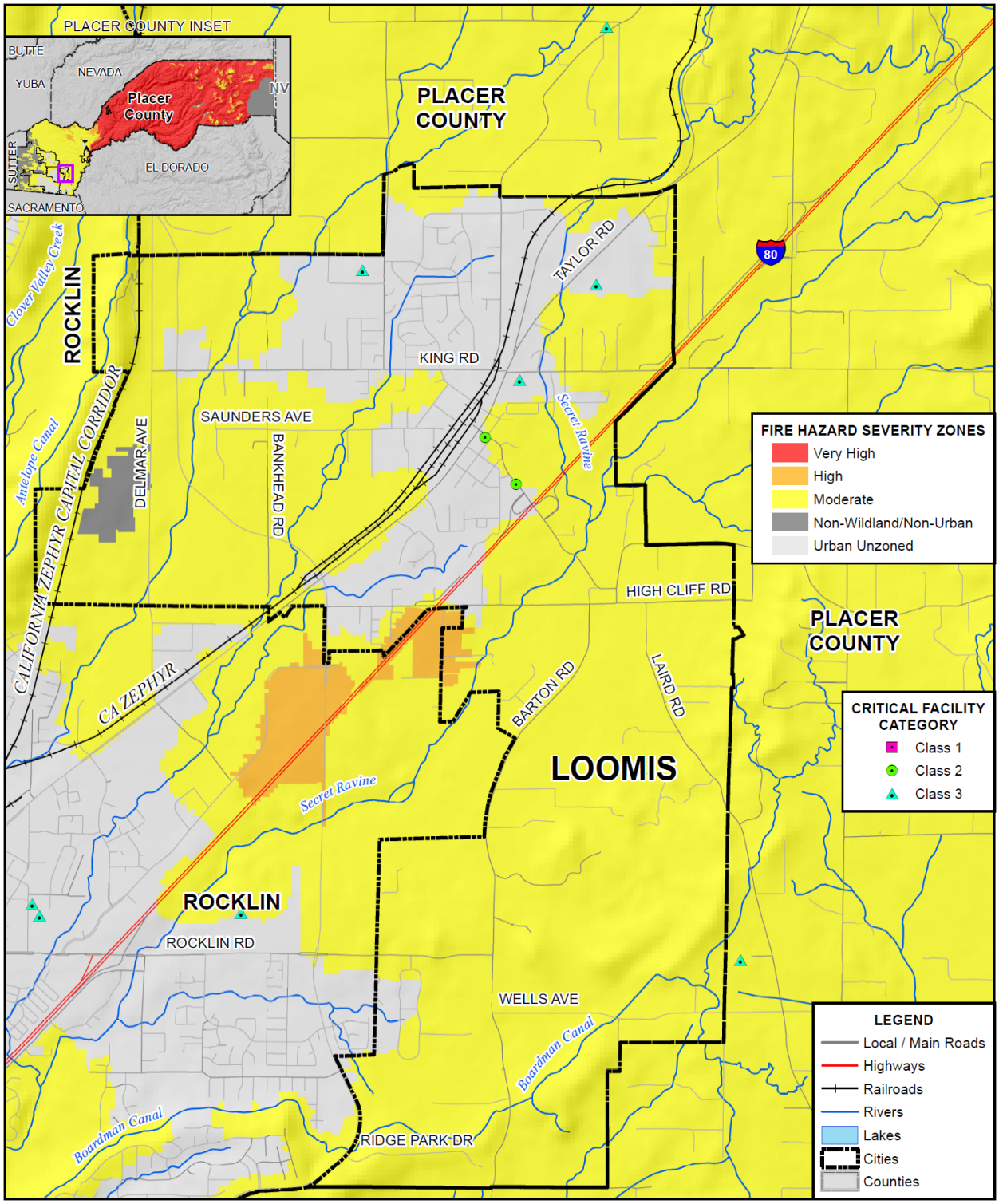
Jurisdiction	Very High		High		Moderate	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Loomis	0	0	27	70	3	8

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Loomis in identified FHSZs. Critical facilities in a FHSZ in the Town of Loomis are shown in Figure D-12 and detailed in Table D-30. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

Figure D-12 Town of Loomis – Critical Facilities in Fire Hazard Severity Zones



Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-30 Town of Loomis – Critical Facilities by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Critical Facility Class	Critical Facility Type	Facility Count
Moderate	Class 2	Police Station	1
Moderate Total			**1**
Urban Unzoned	Class 2	Fire Station	1
	Class 3	School	3
Urban Unzoned Total			**4**
Loomis Total			**5**

Source: CAL FIRE, Placer County

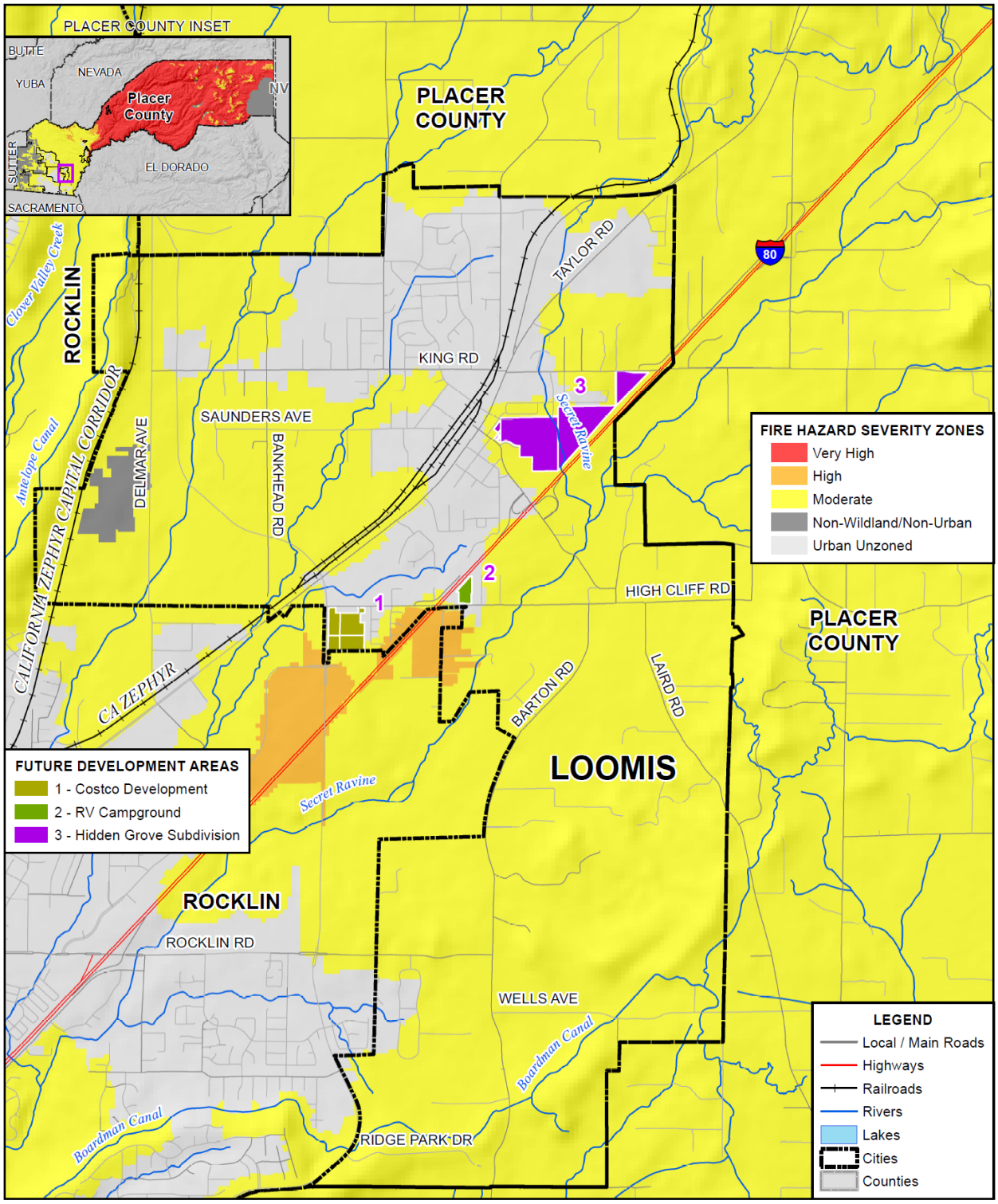
Future Development

Additional growth and development within moderate or higher fire hazard severity zones in the Town would place additional values at risk to wildfire. Town building codes are in effect and should continue to be updated as appropriate to reduce this risk. With the enforcement of the California Building and Fire Codes, will help to minimize the risk to wildfire.

GIS Analysis

The Town provided future development areas were used as the basis for the inventory of future development areas for the Town. Using the GIS parcel spatial file for each of these areas, the areas and parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-13 shows the locations of future development areas the Town is planning to develop on the FHSZs. Table D-31 shows the parcels and acreages of each future development area in the Town in each FHSZ.

Figure D-13 Town of Loomis – Future Development in FHSZs



FOSTER MORRISON CONSULTING

COUNTY OF Placer

Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06_1, Adopted 11/2007 - fhszs06_3_31, Recommended 12/2008 - c31fhszl06_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Table D-31 Town of Loomis – Future Development in FHSZ

Fire Hazard Severity Zone / Future Development / Map Number / Description / APN	Total Parcel Count	Improved Parcel Count	Total Acres
Moderate			
Costco Development			
Commercial Development			
045-042-037-000	1	0	2
045-042-036-000	1	0	4
Costco Development Total	***2***	***0***	***7***
Hidden Grove Subdivision			
Residential Development			
044-094-004-000	1	1	0
044-094-005-000	1	1	0
044-094-010-000	1	1	0
044-094-006-000	1	0	0
044-094-001-000	1	1	1
043-080-015-000	1	0	22
043-080-007-000	1	0	0
043-080-008-000	1	0	7
043-080-044-000	1	0	28
Hidden Grove Subdivision Total	***9***	***4***	***58***
Moderate Total	**11**	**4**	**65**
Urban Unzoned			
Costco Development			
Commercial Development			
045-042-035-000	1	0	4
045-042-034-000	1	0	6
Costco Development Total	***2***	***0***	***10***
RV Campground			
044-150-047-000	1	1	3
RV Campground Total	**1**	**1**	**3**
Urban Unzoned Total	**3**	**1**	**13**
Grand Total	**14**	**5**	**78**

Source: Town of Loomis GIS

D.6 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections:

regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation education, outreach, and partnerships, and other mitigation efforts.

D.6.1. Regulatory Mitigation Capabilities

Table D-32 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the Town of Loomis.

Table D-32 Town of Loomis Regulatory Mitigation Capabilities

Plans	Y/N Year	Does the plan/program address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan/General Plan	Y	
Capital Improvements Plan	Y	The Public Works Department looks for opportunities to improve/correct hazards that are within or adjacent to CIPs.
Economic Development Plan	N	The Town is working with Planning and the Chamber of Commerce to develop a plan
Local Emergency Operations Plan	Y	Works with and receives correspondence from the County's Emergency Operation Division
Continuity of Operations Plan	N	
Transportation Plan	Y	
Stormwater Management Plan/Program	Y	Works with County Storm Management group/committee on updates and program changes and enhancements
Engineering Studies for Streams	Y	Currently updating our RMA permit with Ca. Fish and Wildlife.
Community Wildfire Protection Plan	Y	Work with the South Placer Fire Protection District, which provides fire protection services to the Town
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	N	
Building Code, Permitting, and Inspections	**Y/N**	**Are codes adequately enforced?**
Building Code	Y	Version/Year: 2019 California Building Codes (Building, Electrical, Plumbing, Mechanical and Fire)
Building Code Effectiveness Grading Schedule (BCEGS) Score	N	Score
Fire department ISO rating:	NA	Rating: N/A - Loomis does not operate its fire department
Site plan review requirements	Y	

Land Use Planning and Ordinances	Y/N	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning ordinance	Y	Ordinances are effective and adequately administered and enforced.
Subdivision ordinance	Y	Ordinances are effective and adequately administered and enforced.
Floodplain ordinance	Y	Ordinances are effective and adequately administered and enforced.
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Y	Ordinances are effective and adequately administered and enforced.
Flood insurance rate maps	Y	Ordinances are effective and adequately administered and enforced.
Elevation Certificates	Y	Ordinances are effective and adequately administered and enforced.
Acquisition of land for open space and public recreation uses	Y	Ordinances are effective and adequately administered and enforced.
Erosion or sediment control program	Y	Ordinances are effective and adequately administered and enforced.
Other		
How can these capabilities be expanded and improved to reduce risk?		
While currently in the process of the Town's 2020-2040 General Plan Update, matters of fire fuel prevention Town wide has been a topic of discussion. The Town is looking at ways to increase its capabilities for fire/fuel prevention.		

Source: Town of Loomis

As indicated above, the Town has several programs, plans, policies, and codes and ordinances that guide hazard mitigation. Some of these are described in more detail below.

As indicated above, the Town has several programs, plans, policies, codes and ordinances in place and/or that they follow. The General Plan for the Town of Loomis is the most comprehensive. The following section provides an overview of the General Plan and identifies specific policies related to hazard mitigation that are included in the plan.

The Town of Loomis General Plan Program, 2020

The Town of Loomis General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the Town is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The general plan includes a Safety Element that focuses on safety issues to be considered in planning for the present and future development of the Loomis Planning Area. Identified hazards include fire, geologic/seismic, flooding, and hazardous materials. Mitigation-related issues, goals, policies, and actions are presented below.

Issues	
Issue 1:	The rural nature of the community and presence of large open space parcels increases the Town's risk of wildland and fire hazards at the urban edge.
Issue 2:	A number of properties along local creeks have been flooded during winter storms, despite flood preventative measures.

Goals	
Goal 1:	To reduce the risks associated with wildland and urban edge fires in the Town's rural areas.
Goal 2:	To reduce the risks associated with wildland and urban edge fires in the Town's rural areas.
Goal 3:	To reduce the potential for and damage resulting from storm flooding hazards within the community.
Goal 4:	To reduce the risks associated with potential seismic activity, including groundshaking, liquefaction, and landslides.

Policies	
Policy 1:	Loomis shall enforce building codes and other Town ordinances having an effect upon fire hazards and fire protection. The Town shall maintain adequate street widths and turning radii to accommodate fire protection equipment. New development shall ensure adequate water pressure and volume for firefighting.
Policy 2:	Engineering analysis of new development proposals shall be required in areas with possible soil instability, flooding, earthquake faults, or other hazards, and prohibit development in high danger areas.
Policy 3:	Loomis shall comply with Placer County's Emergency Response Plan, as well as revise the Town Emergency Plan to address Town-specific issues.
Policy 4:	No new structures or additions to existing structures shall be permitted in areas identified by the federal Flood Insurance Rate Maps (FIRMs) or the Town Engineer as being subject to inundation in a 100-year or more frequent flood event. Exceptions may be granted for public facilities and utilities. New development shall also be prohibited in the future 100-year flood zone, based on buildout conditions as determined by FEMA and FIRM maps. Development will be required to adhere to Placer County Flood Control District policies and the Dry Creek Watershed Control Plan.
Policy 5:	New development near stream channels shall be designed so that reduced stream capacity, stream bank erosion, or adverse impacts on habitat values are avoided.
Policy 6:	Further channelization and/or banking of creeks or streams within the planning area shall be discouraged, unless no other alternative is available to minimize flood risk. Setbacks from flood sources shall be the preferred method of avoiding impacts.
Policy 7:	Site-specific recommendations of the Town's Drainage Master Plan, upon completion, shall be applied to individual development projects as appropriate.
Policy 8:	Loomis shall cooperate with Federal, State, and local authorities to ensure that loss due to seismic activity and other natural and man-made disasters is minimized.
Policy 9:	Loomis shall encourage compliance with State requirements for unreinforced masonry buildings and seismic safety.
Policy 10:	Loomis shall continue to train and equip Town personnel to cope with emergency disaster situations, including hazardous material incidents.
Policy 11:	A Street Address Ordinance shall be adopted to assist effective emergency response by requiring adequate street address identification.

Policies	
Policy 12:	Application materials for residential subdivisions proposed within or near oak woodlands shall include Wildland fire protection plans showing how vegetation clearance will be maintained around structures while preserving oak trees.

D.6.2. Administrative/Technical Mitigation Capabilities

Table D-33 identifies the Town department(s) responsible for activities related to mitigation and loss prevention in Loomis.

Table D-33 Town of Loomis's Administrative and Technical Mitigation Capabilities

Administration	Y/N	Describe capability Is coordination effective?
Planning Commission	Y	
Mitigation Planning Committee	N	
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Y	Sidewalk to remove tripping hazards. Brush mowing for fire prevention and provide better line of sight. Pole hole repair program, vehicle and bike safety Street sign replacement program-retro reflectivity Street stripping program Programs to help reduce vehicular speeding
Mutual aid agreements	Y	PCSO has mutual aid agreements with all County law enforcement agencies; South Placer Fire has mutual aid agreements with all fire agencies.
Other		
Staff	**Y/N FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?**
Chief Building Official	Y	Consultant
Floodplain Administrator	Y	Certified Floodplain Manager, Consultant
Emergency Manager	Y	Town Manager
Community Planner	Y	Consultant
Civil Engineer	Y	Full time engineer.
GIS Coordinator	Y	Consultant
Other		
Technical		
Warning systems/services (Reverse 911, outdoor warning signals)	N	The Town relies on the County Sheriff's agency and Fire District to perform these services.
Hazard data and information	Y	
Grant writing	Y	Town Staff
Hazus analysis	N	
Other		

How can these capabilities be expanded and improved to reduce risk?
Being a small Town with limited revenue, the ability to obtain outside funding would help provide the resources to implement programs and sustain ongoing efforts.

Source: Town of Loomis

D.6.3. Fiscal Mitigation Capabilities

Table D-34 identifies financial tools or resources that the Town could potentially use to help fund mitigation activities.

Table D-34 Town of Loomis's Fiscal Mitigation Capabilities

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Y	Grant funding and General Fund
Authority to levy taxes for specific purposes	Y	Town Council can authorize the process in levying taxes through a ballot vote and or Prop 218 process.
Fees for water, sewer, gas, or electric services	N	
Impact fees for new development	Y	Town can institute new development fees as necessary
Storm water utility fee	Y	Town Council can authorize the process in levying taxes through a ballot vote and or Prop 218 process.
Incur debt through general obligation bonds and/or special tax bonds	Y	Town Council can authorize the process in levying taxes through a ballot vote and or Prop 218 process.
Incur debt through private activities	Y	Town Council can authorize the process in levying taxes through a ballot vote and or Prop 218 process.
Community Development Block Grant	Y	Town can (and has) apply for CDBG grants
Other federal funding programs	Y	Town continually seeks out funding programs
State funding programs	Y	Town continually seeks out funding programs
Other		
How can these capabilities be expanded and improved to reduce risk?		
The Town can and will continue to pursue funding opportunities for hazard mitigation projects.		

Source: Town of Loomis

D.6.4. Mitigation Education, Outreach, and Partnerships

Table D-35 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information.

Table D-35 Town of Loomis's Mitigation Education, Outreach, and Partnerships

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Y	The Town will work with local citizen groups (senior citizen groups, schools, service clubs, for example) to provide information
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Y	The Town will continue to partner with several agencies for public education (Recology, PCWA, SPMUD, PCSO, SPFD) for public education
Natural disaster or safety related school programs	Y	These types of programs are run by the school districts and our service providers (Sheriff and Fire District)
StormReady certification	N	
Firewise Communities certification	Y	This is being considered under the 2020-2040 General Plan Update process.
Public-private partnership initiatives addressing disaster-related issues	N	The Town will continue to partner with our private partners to provide this information
Other		
How can these capabilities be expanded and improved to reduce risk?		
The City may look at StormReady certification. The City will look for other ways to partner with State, regional, County, and local entities on mitigation outreach.		

Source: Town of Loomis

Town of Loomis Code Enforcement works with the Loomis Fire Department to notify and remind residents and businesses within Loomis to provide the required fire protection buffer zone. The Town and Fire Department mail out letters to all that are in violation. Within this letter sections 7.04.010 – 7.04.190 of the Loomis Code are referenced.

D.6.5. Other Mitigation Efforts

The Town has many other completed or ongoing mitigation projects/efforts that include the following:

- In 2000-2001 the Town replaced all old street signs with new larger and more reflective signs. The Town's construction standard was also changed so that all new developments within town are built to this standard. By increasing the size of lettering and requiring them to be made with a high intensity background will help emergency responders.
- The Town's Maintenance Department evaluates and then focuses efforts on the creeks and channels that have the highest probability to cause flooding.
- The Town has recently completed several improvements to Taylor Road which may mitigate potential flooding/ponding on that street.
- Enhancing capacity in the Town's storm drain system with enhanced maintenance of the drainage swales.

D.7 Mitigation Strategy

D.7.1. Mitigation Goals and Objectives

The Town of Loomis adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

D.7.2. NFIP Mitigation Strategy

The Town of Loomis joined the National Flood Insurance Program (NFIP) on December 29, 1986. As a participant of the NFIP, the Town of Loomis has administered floodplain management regulations that meet the minimum requirements of the NFIP. The management program objective is to protect people and property within the Town. The Town of Loomis will continue to comply with the requirements of the NFIP in the future.

In addition, the Town of Loomis actively participates with the County of Placer to address local NFIP issues through a regional approach. Many of the program activities are the same for the Town of Loomis as for Placer County since participation at the County level includes all local jurisdictions. An elected official of the Town of Loomis is a designated representative on the Placer County Flood Control District Board.

The Town's regulatory activities apply to existing and new development areas of the Town; implementing flood protection measures for existing structures and new development, and maintaining drainage systems. The goal of the program is to enhance public safety, and reduce impacts and losses while protecting the environment. The Town has a Flood Damage Prevention Ordinance that regulates construction in the floodplain. The Town intends to continue to implement the ordinance and participate at the regional level with Placer County implementing appropriate measures to mitigate exposure and damages within designated flood prone areas.

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS which are to reduce flood losses, facilitate accurate insurance rating, and promote the awareness of flood insurance. The Town of Loomis is not a current participant in the CRS program.

More information about the floodplain administration in the Town of Loomis can be found in Table D-36.

Table D-36 Town of Loomis Compliance with NFIP

NFIP Topic	Comments
Insurance Summary	
How many NFIP policies are in the community? What is the total premium and coverage?	58 policies $58,651 in premiums $15,738,400 in coverage

NFIP Topic	Comments
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	14 losses $365,984.69 in losses paid 2 substantial damage claims
How many structures are exposed to flood risk within the community?	117 structures in 1% flood zone 13 structures in 0.2% flood zone
Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL)	3 RL 0 SRL
Describe any areas of flood risk with limited NFIP policy coverage	None
Staff Resources	
Is the Community Floodplain Administrator or NFIP Coordinator certified?	Not currently
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Permit review, GIS, and inspections
What are the barriers to running an effective NFIP program in the community, if any?	Proper funding.
Compliance History	
Is the community in good standing with the NFIP?	Y
Are there any outstanding compliance issues (i.e., current violations)?	N
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	CAV 8/17/2011
Is a CAV or CAC scheduled or needed?	N
Regulation	
When did the community enter the NFIP?	December 29, 1986
Are the FIRMs digital or paper?	Digital
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Meet the standard
Provide an explanation of the permitting process.	Through application and Planning and Engineering approval
Community Rating System	
Does the community participate in CRS?	N
What is the community's CRS Class Ranking?	N/A
What categories and activities provide CRS points and how can the class be improved?	N/A
Does the plan include CRS planning requirements?	N/A

D.7.3. Mitigation Actions

The planning team for the Town of Loomis identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

- Climate Change
- Drought & Water Shortage
- Earthquake
- Floods: 1%/0.2% annual chance
- Floods: Localized Stormwater
- Pandemic
- Severe Weather: Heavy Rains and Storms
- Tree Mortality
- Wildfire

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each priority hazard for the five year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement and would like to preserve their hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement.

Multi-Hazard Actions

Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

Hazards Addressed: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Pandemic, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (AB 2140).

Project Description: Specifically, this section requires that each jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

Other Alternatives: No action

Existing Planning Mechanisms through which Action will be Implemented: Safety Element of General Plan

Responsible Office: Town of Loomis Planning Department

Priority (H, M, L): High

Cost Estimate: Jurisdictional board/staff time

Potential Funding: Local budgets

Benefits (avoided Losses): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

Schedule: As soon as possible

Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness

Hazards Addressed: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Pandemic, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: The Town and County play a key role in public outreach/education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural disaster event.

Project Description: A comprehensive multi-hazard outreach program will ascertain both broad and targeted educational needs throughout the community. The Town will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to the community. This includes measures the public can take to be better prepared and to reduce the damages and other impacts from a hazard event. The public outreach effort will leverage and build upon existing mechanisms.

Other Alternatives: Continue public information activities currently in place.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Existing County outreach programs will be reviewed for effectiveness and leveraged and expanded upon to reach the broader region.

Responsible Office: Town of Loomis in partnership with the County

Priority (H, M, L): High

Cost Estimate: Annual costs to be determined, and will depend on the scope and frequency of activities and events as well as volunteer participation

Benefits (Losses Avoided): Increase residents' knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damages, relatively low cost to implement.

Potential Funding: Local budgets, grant funds

Timeline: Ongoing/Annual public awareness campaign

Action 3. Renewal Of Town of Loomis RMA permit

Hazards Addressed: Climate Change, Flood, Localized Flood, Heavy Rain and Storms

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: To be able to maintain and perform simple maintenance on the various drainage channels, the Town needs to have a Routine Maintenance Agreement (RMA) permit form Ca. Fish and Wildlife.

Project Description: Permit will allow Town Staff and contractors to perform maintenance activities to provide proper drainage flow.

Other Alternatives: N/A

Existing Planning Mechanism(s) through which Action Will Be Implemented: N/A

Responsible Agency/ Department/Partners: Town of Loomis Department of Public Works

Cost Estimate: $50,000

Benefits (**Losses Avoided**): Potentially avoid flooding issues through scheduled maintenance

Potential Funding: General Fund

Timeline: 2 to 3 months

Project Priority (**H, M, L**): H

Action 4. Climate Change Mitigation

Hazards Addressed: Climate Change and all hazards exacerbated by Climate Change

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: With the noticeable change of weather patterns, it has become more noticeable that our community needs to be more prepared in regard to differing weather patterns, such as longer dry and heat seasons and on the opposite longer wet and cooling seasons. If this trend is becoming our new normal, the challenge will to be to educate the local population on how to be prepared.

Project Description: Establish an educational awareness outreach programs on how to educate the residential and business community about extreme temperature changes and the dangers that are posed to a community when they do not protect themselves or the community around them.

Other Alternatives: Work with other jurisdictions to promote Best Management Practices regarding preparedness for extreme weather changes.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Using the Town's residential and commercial data base to correspond to the residents and businesses with educational information regarding climate change hazards, also to communicate who to correspond if help or assistance is needed.

Responsible Agency/ Department/Partners: Town of Loomis, Placer County Fire District, Placer County Sheriff's Department

Cost Estimate: Annual outreach and materials, $20,000

Benefits (Losses Avoided): If individuals are prepared, there will be less draw down on first responders.

Potential Funding: Grants, General Fund

Timeline: 1 to 2 years

Project Priority (H, M, L): H

Action 5. Drought and Water Shortage Mitigation

Hazards Addressed: Climate Change, Drought, lack of potable water

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: During the last decade areas in California have witnessed and suffered through the lack of potable water due to long periods of drought. The issue that has become obvious is with the lack of water, both businesses and residents have to be petter prepared to live with less and better prepared on how to do more with less.

Project Description: Establish Town wide water conservation polices and best management practices that incorporate Town, residents, businesses, and those who utilize groundwater. Establish a retro fit water supply program, Encourage drought resistant landscaping, promote groundwater recharging efforts.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: City Manager and Public Works Departments establishing polices with in their department on how to conserve water use.

Responsible Agency/ Department/Partners: Town of Loomis, Placer County Water District, Town Administration, Public Works, and Planning Departments

Cost Estimate: Annual cost to keep current and up to date, $50,000

Benefits (Losses Avoided): Preserving water for human and vegetation (food crops) during drought conditions.

Potential Funding: Grants, partnership with water purveyor, General fund

Timeline: 1 to 2 years to get project partners in place to sustain the drought program

Project Priority (H, M, L): H

Action 6. Earthquake Mitigation and Preparedness

Hazards Addressed: Earthquakes

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Earthquakes come without notice, the damage that can occur can be sever, collapse of buildings, liquefaction and landslides, loss of essential infrastructure, property damage and death.

Project Description: Establish programs that can assist residents and businesses on how to prepare for, during, and post-earthquake.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Establish a safety committee that can provide strategies, draft polity for Town Council to adopt to equip staff and community on next steps in a seismic event. Provide outreach materials to community on how to prepare for during an earthquake, what to do and what not to do. Establish simulated earthquake drills through an emergency operation center (EOC) scenario.

Create action plan for failed utilities.

Work with the building department to review building inventory in Town that may be vulnerable to earthquake damage such as unreinforced masonry structures, public and private buildings that were built prior to earthquake standards. Review facilities that have generators and elevators that they are properly braced. Map on GIS those structures that are at risk during a seismic event.

Create programs to distribute earthquake hardware items such as hot water heater straps, gas and water keys/wrenches to shut off hose gas and water lines to home.

Responsible Agency/ Department/Partners: Town of Loomis, Loomis Public Works, Building, Planning and Administrative Departments Placer County Fire District, Placer County Sheriff Department, Local utility companies,

Cost Estimate: Annual $25,000

Benefits (Losses Avoided): First is to save lives, second is hopefully minimize property damage

Potential Funding: Grant programs, utility companies' contribution to the Earthquake awareness program and outreach, local businesses, General fund

Timeline: 5 to 10 years

Project Priority (H, M, L): H

Action 7. Pandemic/Epidemic Mitigation

Hazards Addressed: Pandemic, Virus outbreaks, Flu strains, food contamination

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Recently the COVID 19 outbreak brought an awareness to the community that protocols, policies and a greater community awareness needs to be in place for future virus outbreaks that may rise to the level of Pandemic or epidemic status.

Project Description: Provide a community outreach program that can assist in what to do and not what to do in a pandemic/epidemic outbreak. Provide hot lines for residents and businesses to help navigate through the various changes that take place during an outbreak. Provide local updates vis local website, mailers and local CCTV events. Stockpile and provide personal protective equipment (PPE) and sanitary cleaning supplies.

Other Alternatives: Continue with public information activities currently in place

Existing Planning Mechanism(s) through which Action Will Be Implemented: Continue to review and update local outreach materials and outreach efforts.

Responsible Agency/ Department/Partners: Town of Loomis working with County and State Health Department/

Local health providers and vendor for PPE

Cost Estimate: Annual costs are determined by the outbreak event, annual cost for stockpiling PPE in the range of $2000 to $3000

Benefits (Losses Avoided): Being prepared will help save lives and keep community informed and educated on what to do.

Potential Funding: Local contributions from businesses and health organizations, Grant opportunities, General fund

Timeline: Ongoing

Project Priority (H, M, L): H

Action 8. Severe Weather - Heavy Rains Mitigation

Hazards Addressed: Climate Change, Flooding, Landslides, erosion,

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: With Climate Change prolonged heavy rains can be anticipated. When such severe weather is encountered, the public and businesses are fronted with flooding, landslides and severe erosion activity. Drainage channels to move the water to larger bodies of water are compromised, private and public properties are susceptible severe damage and total loss, lives can also be compromised. Utilities are also compromised with power outages.

Project Description: Conduct weather risk analysis of drainage channels, hillside embankments that may be vulnerable to landslide, liquefaction, or erosion. Identify at risk members of the Loomis population who may need assistance during severe weather and heavy rain events. Provide outreach to the community through the Town website, mailers and updates at public meetings on how to respond to such events.

Other Alternatives: Continue with Public outreach efforts to inform residents and public

Existing Planning Mechanism(s) through which Action Will Be Implemented: Outreach efforts will be administered through the Town of Loomis's Administrative Department.

Responsible Agency/ Department/Partners: Town of Loomis City Manager's Office, Loomis Public Works, Placer County Fire District, County Sheriff, local utility companies

Cost Estimate: General fund,

Benefits (Losses Avoided): Having an educational and outreach process in place will help preserve lives and property.

Potential Funding: Grant funding and local funds

Timeline: Ongoing, continued work on public awareness

Project Priority (H, M, L): M

Action 9. Tree Mortality Mitigation

Hazards Addressed: Falling trees, Tree Mortality, Wildfires

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Dead and diseased trees left unattended can become fuel for wildfires, when within the right of Way, they can become a hazard to the public who live and travel in the path of the ailing or dead trees. Dying or dead tree can largely be contributed to Climate Change.

Project Description: Survey the Town's tree population around Town, evaluate the current health of tress that make the Right of Way vulnerable to potential life-threatening conditions during inclement weather events and also public and private property damage. The survey process would include evaluating the trees, tagging, and posting on the GIS system.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Amend existing or establish new tree ordinances that have provisions to enforce landowners to maintain the tree population on their property, remove dying or dead trees so as not to produce a hazard. Public works to provide an inventory of street and park trees and the health of those trees and an action plan to maintain or remove trees.

Responsible Agency/ Department/Partners: Town of Loomis Public Works and Planning Departments.

Cost Estimate: Annual costs to maintain public trees, $25,000 to $30,000, cost to outreach and educate private landowners on tree mortality, $10,000.

Benefits (Losses Avoided): Remove dying or diseased trees will assist in trees not causing damage and or harm to the public or property dame. It will also assist in not providing fuel for wildfires.

Potential Funding: Local funding, General fund, parks grant

Timeline: Ongoing

Project Priority (H, M, L): M

Action 10. Wildfire Mitigation

Hazards Addressed: Tree Mortality, Wildfire

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background: Wildfires have increased over the years due to lack of forest management, weather conditions, unmaintained utilities. Wildfires have been the cause of huge loss of property and loss of life.

Project Description: The project would include identifying wildfire hazard areas. It would include establishing local policies and a comprehensive plan to provide safety for those who reside in potential wildfire areas. Require fire resistance construction in proposed high fire risk areas and amend local building coded to reflect those enhancements. Policies that promote defensible space programs to reduce fire risk around structures, create program to remove and replace flammable vegetation with less flammable vegetation.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Revise zoning maps to reflect high risk areas. Revise building codes to reflect fire resistant building materials in high risk fire areas.

Responsible Agency/ Department/Partners: Town of Loomis's Planning and Building Department, Placer County Fire District.

Cost Estimate: With in annual operation Budget, annual outreach material - $5,000

Benefits (Losses Avoided): Preservation of Life and property

Potential Funding: Local funding, grant opportunities, general fund

Timeline: 1 to 2 years to get project running, ongoing after that start up period

Project Priority (H, M, L): High